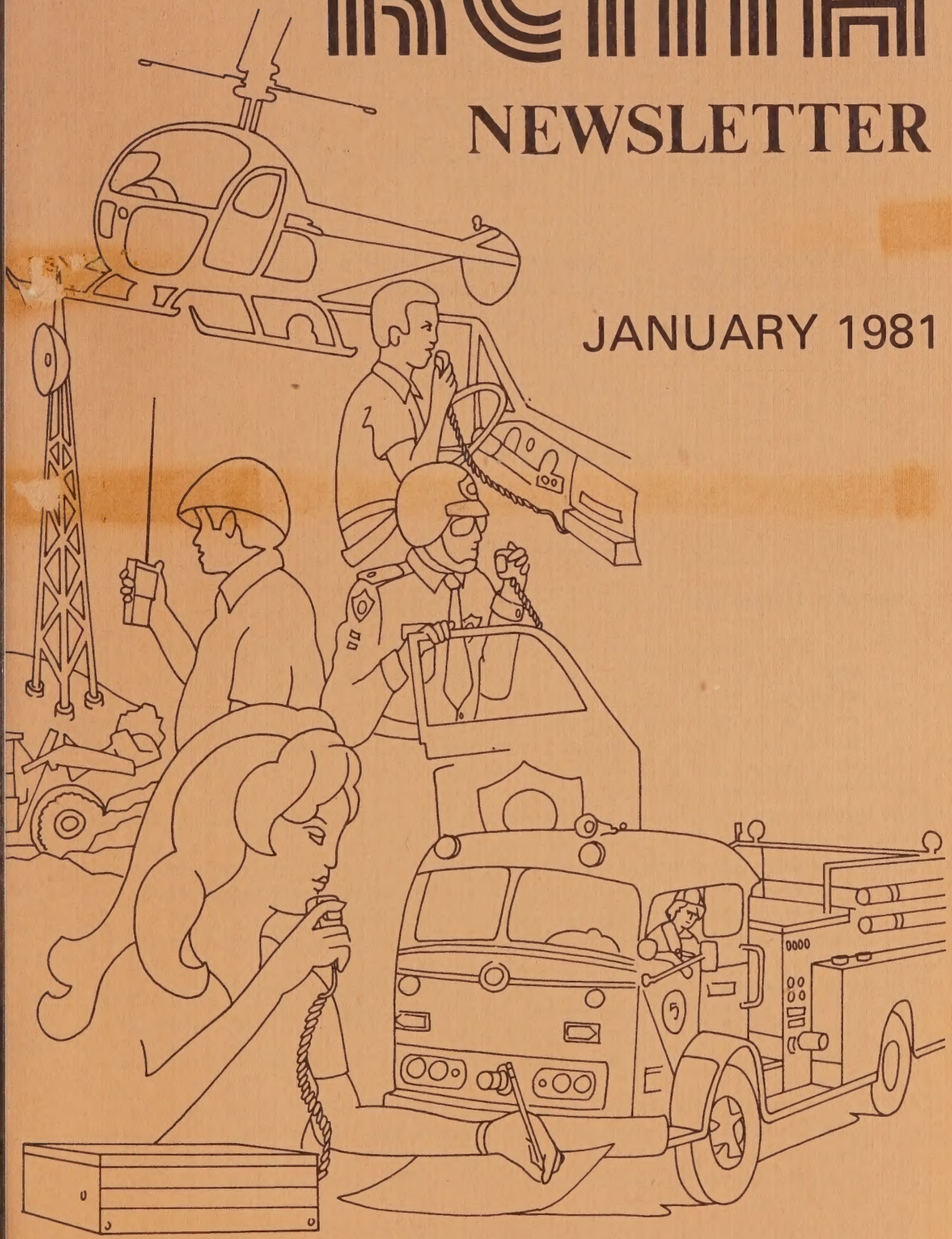
RCMA

NEWSLETTER

JANUARY 1981



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OF MONITOR RADIO LISTENERS

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RCMA NEWSLETTER

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FOR YOUR INFORMATION:

1. All club business, unless otherwise noted, must be addressed to: RCMA, P.O. Box 4563, Anaheim, CA 92803. This includes matters that relate to renewals, changes of address, newsletter delivery problems, etc.
2. Input to the RCMA Newsletter must be mailed to the proper editors whose addresses are included in the individual column headings. If no particular column seems appropriate, send it to RCMA, P.O. Box 216, Willow Grove, PA 19090 and mark the envelope "For Newsletter."
3. RCMA Newsletter back issues (reprints) are not presently being offered for sale to members.
4. To forward a letter to a specific RCMA member whose address you do not know, put your message to that person in a stamped envelope with your return address in the envelope and mail to: RCMA, P.O. Box 408, Earp, CA 92242.
5. Please include your RCMA membership number with all correspondence to newsletter editors or club headquarters.
6. If you require a reply when writing to RCMA headquarters or one of the editors, you MUST enclose a self-addressed, stamped envelope.
7. Please only write on one side of the paper.
8. Please don't combine in one letter several items that should go to different addresses.
9. If you are inclined to type what you submit to the newsletter, please don't exceed a seven-inch column width and please single space. Doing this may save an editor from having to retype the material. Please don't use script type.
10. Your RCMA membership number and expiration date appear on your newsletter mailing label.
11. You may join or renew your membership for ONLY one year at a time.
12. The RCMA Newsletter accepts paid advertising. If you would like to place a paid ad, please write to our advertising manager (address above) for our advertising guidelines.

RCMA NEWSLETTER
JANUARY 1981 ISSUE 59
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RCMA, P.O. Box 4563, Anaheim, CA 92803

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The RCMA Newsletter is published monthly by members of the RADIO COMMUNICATIONS MONITORING ASSOCIATION, P.O. Box 4563, Anaheim, CA 92803. Subscription rate/membership fee is $10.50 per year for U.S. residents and $12.85 (payable in U.S. funds) for persons in all other countries (dues subject to change). Information contained herein primarily is obtained from members and does not necessarily present the position or reflect the opinion of RCMA as a whole. The RCMA Newsletter editors and officers are not responsible for the accuracy or validity of information contained herein. RCMA does not necessarily recommend or endorse products or services advertised herein. This publication is copyrighted ©. Reproduction of any material in this newsletter is prohibited without prior written permission.

***** 1980 R.C.M.A. Newsletter back issues are now available.

Price $1.50 per copy

Orders should be sent to:

R.C.M.A.
Bill Fll, Secretary
2831 Hermanos Street
Pasadena, Ca 91107

Back issues prior to 1980 will be announced when they are available.

** Calendar **

Send notices of upcoming events for the Calendar section to John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803. Please send notices well in advance of the Newsletter deadline.

January 5 MONDAY Newsletter deadline for the "February" newsletter.

Janrary 6 TUESDAY Board meeting and newsletter labeling session at Anaheim Library Branch 1349 S. Euclid, Anaheim, Ca. Labeling will start about 6:30 PM. Board Meeting will follow. This is an opportunity to have your voice heard, assist the club, and learn the latest scanner activity. All members are welcome. Any DX members in the area on vacation, here is a good spot to break the trip. We can use all the help we can get.

Janruary 16 FRIDAY General Meeting: Mercury Savings and Loan, Valley View and Lincoln Avenue, Buena Park, Ca.

Elections are comming up soon. If you are interested in running for office please contact R.M.C.A. P.O.Box 4563 E., Anaheim, Ca 92803. Any member is eldigible to run for any office. We encourage members from out of the Anaheim area to run. However since the logistics of the newsletter and the bank are located in Anaheim, the treasurer should be someone local.

Reports of Meetings and Officers

Send reports (informal accounts) of RCMA meetings, gatherings, etc. which have occured to: John Clark, RCMA, P.O. Box 4563, Anaheim, CA 92803.

Due to the increase in costs, (postage, printing, etc) and the logostics of the newsletter there will be a dues increase starting in January 1981. The member ship fee will be $12.00 per year for state sides members with overseas membership fees prorated. The board has spent several hours discussing this increase. We have now reached the point where the club newsletter that use to be four mimo sheets and mailed to 200 members is now too big to put in one car to pickup at the printers, or to take to the postoffice.

We have adopted a policy of fixing a firm date now on all price announcements The $12.00 newmember or renual price will be in effect from January 1, 1981 to July 1, 1981. We do not anticipate any other increase for next year, but if we do it will be placed in effect after July 1, 1981.

******* note the date on your label. It is the date your last newsletter in your present membership will be mailed. Not the date on the cover of the newsletter. Your membership ending month is printed on the top line of your label beside your membership number. The cover date on the newsletter is one month ahead of the date it is to be mailed. This is done to allow the postoffice to make a speedy delivery to you before it is out of date.

RADIO COMMUNICATIONS MONITORING ASSOCIATION
Delaware Valley Chapter

To all RCMA members in Greater Philadelphia:

Another chapter meeting has been scheduled for RCMA members who live in the Philadelphia area. We will meet Saturday, November 22 at 2 p.m. at the Free Library of Philadelphia, Northeast Regional Branch, Cottman Avenue and Oakland Street in the Northeast section of Philadelphia.

Because of letters I have sent you in the past, you should be aware what our chapter of RCMA is all about. We have several members who get together each month, alternating general meetings with tours of communications centers each month. Some of the places we have toured in the past include Philadelphia Police headquarters, Camden County communications center and the ARCO Go-Patrol broadcast center. Many other tours are on tap for the chapter, but you must become involved to enjoy the fun.

What happens at our monthly meetings? Generally, members bring lists to swap with others, talk about the latest "hot" frequency someone found or talk about how to improve your monitor reception. There's plenty of people to talk to about all types of things, but you have to come out to find out what it's all about.

In addition to the November meeting in Northeast Philly, a special activity is being planned for the December meeting. This will be discussed at the chapter meeting in November. Perhaps a tour to several repeater sites in the Philadelphia area? More to come!

The new meeting place (the first within Philadelphia city limits) is very accessible. Here's how to get there:

FROM NORTH/CENTRAL JERSEY AND EASTERN SUBURBS--South on N.J. Turnpike to Pennsylvania Turnpike. Exit 28-Philadelphia interchange and head south on Route 1. It will become the Roosevelt Boulevard in city limits. Exit at Cottman Avenue (Route 73) exit and turn right (west). The library is a few blocks ahead on the left side of Cottman Avenue, across from Gimbels department store (just past Bustleton Avenue). There's plenty of parking in the area; park wherever is best.

FROM SOUTH JERSEY--North on Route 73 and over the Tacony-Palmyra Bridge into Philly. Follow signs for Route 73 west when you get off bridge until it turns into Cottman Avenue. Cross over Roosevelt Boulevard (Route 1) and library is a few blocks ahead on the left, across from Gimbels store.

FROM WESTERN SUBURBS--Schuylkill Expressway (I-76) to Route 1 north (Roosevelt Expressway) until it turns into the Roosevelt Boulevard after Broad Street. Follow north until Cottman Avenue exit (Route 73). Turn left (west) and library is a couple blocks ahead on left side across from Gimbels store.

FROM ELSEWHERE--If these directions aren't explicit enough fou you, let me know and I'll help you out.

If you are able to attend this meeting, please give me a phone call right away at (215) 657-5324 so we know how many people to expect. Hope to see you November 22.

73,
Chuck Gysi (PA-005)
RCMA Managing Editor

Dear Fellow R.C.M.A. Members:

MEETING AND TOUR NOTICE

The third and last meeting for 1980 of the Chicago - Midwest Area R.C.M.A. Chapter will be held at Nancini's Restaurant 5555 St. Charles Road Berkeley, Il 60163, 544-7277 on Saturday November 22, 1980. The doors are unlocked at 1 p.m.

The 1981 meeting schedule is enclosed.

The first (we hope of many) Chapter tour will be held in conjunction with the Chicago Police Department open house at their Headquarters 1121 S. State St. on Sunday November 9, 1980. You will see their dog and pony show (K9 unit Mounted unit), see Radar demo's, tour the famed Crime Labs, and finish in the Comm Centers (45+ radio consoles) WOW. We'll meet as a group at the front door at 1 P.M. If you can't make it that early, come anyway as the place is open till 4:30. Bring the family. Those who want can make their own after meeting arraignments. Since this is near the loop, the sidewalks won't be rolled up. Parking is on the street. I'll park South of Roosevelt Rd. on State. Most parking regs and meters don't apply on Sundays but check the signs and stickers in the meters!

Thank goodness we don't have any business to disgust like at the last meeting. There are two items. First I need a quick show of hands on where you would be willing to drive for possible tours. Second, a member desires to edit an R.C.M.A. Chicago Area frequency list. Since POLICE CALL does a fair job, we will discuss what format and content we really need. Lets have your ideas.

Some of you have done quite well by me with self-addressed stamped envelopes and I thank you much. For others please PLEEZE bring some to give me a hand in these mailings.

Mike Yanul, without being asked, has been mailing out a Chicago Chapter Newsletter. Let's give HIM some self-addressed stamped envelopes too!

I noticed members passing self-addressed stamped envelopes among themselves to exchange frequency lists etc. GOOD IDEA! Keep it up. I guess you get the idea by now, bring plenty of self-addressed stamped envelopes.

MEETING SCHEDULE

1;00 - 1:30 P.M. Social - eat if hungary.
1:30 - 4:30 or so Meeting;
Introductions.
Discussion topics listed above.
Short Talk - by one of our panel of experts(not me)
Round Table.
4/4:30 - ???? Fat - Social (the best part, exchange some real frequencys telephone numbers etc.)

NANCINI'S RESTAURANT is located at 5555 St. Charles Road, Berkeley Illinois 60163. Telephone 544-7277. This is located just 2 blocks east of the St. Charles Rd. exit on I - 290 the Eisenhower Expressway Extention.

We can accomodate about 50 members at this location. If we start to get more than that, other meetings will be added to the schedule. As of now, meetings are bi-monthly.

1981 MEETING SCHEDULE

Saturday,	February 7, 1981	1:00 pm
Saturday,	April 11, 1981	1:00 pm
Sunday,	June 7, 1981	1:00 pm
Saturday,	August 8, 1981	1:00 pm
Sunday,	September 27, 1981	1:00 pm
Saturday	November 21, 1981	1:00 pm

These dates are firm. Put this sheet away by your scanner for future referance.

Edward Robert Sirovy IL-004
312-969-2856.....311 S. Williams Street
Westmont Illinois 60559

THOUGHT waves

Chuck Gysi, Managing Editor, P.O. Box 216, Willow Grove, PA 19090

Happy New Year from the newsletter staff and all of RCMA's officers!

With the new year, comes a time for making resolutions (that we aren't supposed to break) for 1981. We all make resolutions like giving up smoking, not talking nasty about the neighbor anymore, and others. But have you thought about your radio hobby? Is there something that could be improved this new year?

For me, I resolute to tidy up all my radio files. Like many of us, I may have the frequency for East Podunk fire in one place and the frequency for East Podunk rescue elsewhere. Everything is recorded on scraps of paper here and there in filling cabinets, drawers and desk tops. It's all easy to find--I know which file folder may contain some federal frequencies and which one may have taxi frequencies, even if they are mixed up as they are.

Regardless, it would be so much easier if I could organize my notes in a comprehensive manner, preferably looseleaf notebooks (it would be so much easier to throw them in the car for a trip).

Anyway, let's make 1981 the Year of Organizing. Those of us who have been compiling notes over the years--let's get organized. That's my New Year's resolution.

And if you're already an organized person, how about making a resolution of sending in some of those organized notes to our column editors this year. They need your support so they can make a resolution of bringing you the best columns this year. We're all in this together!

There are several RCMA chapters in operation around the nation now. In fact, it's to a point where I've lost track these days.

In the next couple of months, we hope to start a column devoted to listing all the chapters and their organizers and listings of chapter meetings and tours.

Perhaps, you've noticed in this newsletter, listings of events taking place with a chapter in your area or maybe you have received information by mail on the chapter in your area.

The RCMA chapter is the best way to get together with fellow monitor enthusiasts and exchange information. And, most chapters don't keep out the DX members passing through. If you're going to be in an area when a chapter is meeting, contact the person organizing the chapter and ask them if you can join in. What better way is there to find out the local frequencies?

We still have a few openings on the newsletter staff. We need a new Satellites column editor for the new year. Bill Blomgren, the current editor, has resigned, and we need someone knowledgable in satellite communications and systems to fill his shoes.

We also need a new Monitoring and the Law column editor. This position has been vacant for many months and should be filled as soon as possible. I feel that this is one of the most important columns in our newsletter and I think it would be prudent to fill it right away.

Last, but not least, I need an assistant editor to help me out with my newsletter duties. This person would put together some of the columns each month and would help out with correspondence. Ideally, this person would reside in the Philadelphia or New York area, but that is not mandatory and I'm willing to work it out with the right perspn somewhere else.

If you are interested in any of the above positions, type me a note to the Willow Grove address, telling me why you are elligible.

I'm asking some of you to bear with me in the next couple of months. I'm working on the metro desk of a newspaper in North Jersey now and am commuting 100 miles round-trip a day. Eventually, I will be moving there, but for now bear with me if I take a little longer to reply to your letters. Also, if you are inclined to call me on the telephone, please limit your calls to between 2 and 6 p.m. through the week, as I am working night shift, and really would rather not be jangled out of bed at 10 a.m.!

YOUR THOUGHTS

P.O. Box 216, Willow Grove, PA 19090

To the editor:

I wish to take this opportunity to respond to a letter from a member of your organization which appeared in a previous issue of the RCMA Newsletter. Our company (Digicom/Systems Research, P.O. Box 1175, New York, NY 10009) is offering a FREQUENCY EXPANSION TECHNIQUES REPORT for users of various programmable scanners. In addition, we offer several other publications of interest to scanner enthusiasts.

There appear to be several inaccuracies in Mr. Menke's letter which I feel are important to clarify to your readers.

The FREQUENCY EXPANSION TECHNIQUES REPORT has never appeared in any publication. While information has been provided on "expansion techniques" in various publications, our report is unique and provides information in a format not found elsewhere.

Mr. Menke also provided the readers with inaccurate information relative to the price of the HANDLER and GROVE publications. Both these publications (which

DIGICOM handles along with many others) are priced higher by the publishers than Mr. Menke's figures. In addition, Mr. Menke failed to mention that the prices he inaccurately gave also failed to take into account the postage and handling fees charged by the publishers of the HANDLER and GROVE directories. This brings the final price to the consumer even higher than Mr. Menke would have one suspect.

Also not mentioned was the fact that our prices have been calculated to include FIRST CLASS delivery and handling costs. This is very important information which must be taken into account.

When one has command of all this information, it becomes apparent that the price differences that Mr. Menke points out are totally inaccurate.

I am requesting that you publish this letter in its entirety so that your readers will have an accurate representation of our company. I also wish to commend your organization for the fine job it has done to enhance the goals of the monitoring community and to provide a format for this exchange of information.

/s/ M. Stephens
Customer Relations
Digicom/Systems Research
New York, New York

To the editor:

This letter comes in response to a letter you published in the November 1980 issue of the RCMA Newsletter from a member, Mr. Scott Menke.

Our special publication, THE CONSUMER BULLETIN, is sent free of charge to any person requesting same. There is no fee for this information. The BULLETIN provides a good deal of material that scanner users and purchasers may find of valuable assistance when selecting a unit. Members of your organization may obtain a copy by simply forwarding a request to Firecom, PO Box 61, New York, NY 10011.

Our company provides consumers with programmable scanners and other communications equipment. We also handle associated publications and frequency directories. Our company does not "publish" other people's material, as Mr. Menke stated in his letter.

We carry many publications, including the Federal Frequency Directory published by Grove Enterprises and the Radio Communications Guide published by Handler Enterprises. The prices we charge for these publications include the postage and handling fees for FIRST CLASS (and in some cases, INSURED) delivery. It should be pointed out to your readers that the prices Mr. Menke gave on these publications was not accurate!

I would appreciate publication of this letter to clarify any misconceptions which may have arisen concerning our company

/s/ Michael Esposito
Firecom Communications
New York, New York

(Editor's note: We thank the above two letter writers for taking their time to write us. RCMA does not assume any responsibility for statements made by any members in letters and any letter does not necessarily represent the opinion of the membership or RCMA as a whole. We will, however, always welcome letters from anyone with opposing points of view.)

To the editor:

In the Federal Government/Military column of the November newsletter, Rene (CA-SC-018) discovered DC voltage from the 12-volt terminal of Bearcat scanners. I tried this with my Regency E-106 and found the same thing true! I was able to light a small 12V light with the scanner on or off. This created a hum from the speaker; I imagine the light drew too many amps.

Scott Miltner (FL-069)
St. Petersburg Beach, Florida

To the editor:

I have been a member of SCAN for two years (a charter member) and I have been an RCMA member for three months.

To say the least, there is no comparison as to which club is better. SCAN's dues are about the same, but that is all. SCAN prints a newsletter four times a year and the months between (supposedly) they send a one-sheet bulletin.

To get to the point, SCAN is a rip-off compared to RCMA. It is written to be read by a 10-year-old.

I hope I saved an RCMA member a 10-buck loss.

Ira Sheinman (NJ-073)
River Edge, New Jersey

To the editor:

After receiving my first newsletter, I was very impressed by the expertise of all the editors and members of the club. I was impressed by the Delaware Valley Chapter tour of the ARCO Go-Patrol facilities. Chuck Gysi is a very knowledgable person of two-way radio systems and their frequencies.

My first introduction to monitoring was a tunable converter used in conjunction with a car radio when I was a teen-ager. From there, I purchased a Regency DR-200 tunable two-band receiver. After that, as electronics progressed, I bought a Regency eight-channel scanner,, and then a Bearcat 101 and 250. It was from these two radios plus a tunable 12-volt Regency that I started my hobby of receiving and collecting federal government frequencies.

Tom Toppin
New Castle, Delaware

To the editor:

You may want to put the following notice in the newsletter to alert your members.

M-Tron has been having a lot of trouble with crystals, especially UHF crystals which are 12.5 to 25 kHz off frequency. M-Tron is aware of the problem and is working to correct the problem but many stores still are selling the defective crystals. Always test the crystal at the time of purchase--testing will save you a lot of time and trouble.

At Monitor Control, we tested all our crystals and sent back all defects, although many of the replacements also were defective. This process took us several days, but we didn't want to sell our customers bad crystals. We still are getting bad crystals from customers who bought them elsewhere. It appears some dealers still are selling bad crystals, even though they know there is a problem.

It should be noted that we found defective crystals made by other manufacturers, but the number of M-Tron crystals was significantly higher. Still, the best advice is always test the crystal before you leave the store.

M-Tron crystals are guaranteed for life. Some crystals are guaranteed for one year, while others carry no guarantee. Any reputable

store should replace defective crystals free of charge. If not, take your business elsewhere.

We hope that this item will be of use to your members.

Monitor Control & Scan Shoppe
San Bruno, California

To the editor:

The Chicago Area Chapter held a meeting recently with 30 members from the Chicago area, central Illinois and Wisconsin. The main point of discussion was the inclusion of shortwave utility in RCMA and the newsletter. I was asked to write to you so that our views will be known.

After a very lengthy discussion of the pros and cons of adding a shortwave utility column, the majority of the members were impartial as to whether or not HF utility should be included, even though many do have shortwave radios. Only a few were totally for or against the column. The general feeling that prevailed can be summed up best in the words of one member who said, "If someone is willing to write the column, let it be. And for those who are not interested in shortwave utility, they can turn the page."

Although there was acceptance of the SW column, there was unanimous disapproval of the way shortwave was introduced into the club and newsletter without any notice to the membership of the policy change. RCMA policy always has excluded frequencies below 30 MHz, and because of it, the club attracted people who were dedicated scanner users. This policy change could alter the perspective and aim of the club after most members joined expecting something else. Some form of voting or solicitation of opinions in the newsletter should have preceded a change in policy.

Michael Yanul (IL-014)
For the Chicago Chapter

To the editor:

I would like to see a chapter directory listing in each newsletter with the name of the contact person so new members would know of our existance. We now have four or five chapters outside of Anaheim and I see some other groups possible if someone wants to take the first steps.

Maybe the time has come to think of Anaheim as just another local chapter separate from the HQ. That might make it easier for the transition to a chapter-based club that we are heading for, whether some individuals like it or not.

Edward Sirovy (IL-004)
Westmont, Illinois

(Editor's note: A chapter directory is in the works. As soon as an editor begins the duties, it will be reality. Keep watching!)

To the editor:

I am writing this letter telling my recent user contact with Electra and the BC-250. Let me preface this by stating that I previously owned a BC-250, and it also had its share of problems.

My current 250 hold serial #147054 with a 1980 date of manufacture. I believe that Electra calls it a "BC-250A" being that it was manufactured in '80, and that it will not operate "out of band" (unless the image technique is used). I purchased the latest 250 from a reputable local firm, and rather expected having to send it in to the factory immediat-

ely, due to spurious emissions that are present on 250's that come out on our local police channel (154.725Mhz). Well, this was not the problem, but, the 250 had such a bad PLL hum (or that's what an expert called it) when signals were received, that I could not even make out what the signal was I was supposed to be monitoring! The dealer informed me that I should send the unit directly back to the factory. I promptly packed the unit up (after having it on for only one hour), and sent an accompanying letter to Electra with the unit via UPS. I have to admit that response was prompt, and after about 2 weeks I had my unit back.

The hum was slightly diminished, but still intolerable on UHF and low VHF. I again packed up the unit and sent a letter to Electra, and once again received the unit in approximately two weeks. This time, nothing whatsoever was different from when I received the unit from the factory last time.

I wrote the factory service department a letter telling of my woes with this 250, and promptly received instructions to again send the the unit back to the factory, with a copy of the letter. I did so, and received the unit again in approximately 2 weeks. This time, I got the unit back, and it appeared to have a new case, keyboard, insignia, and hum problem greatly diminished, but still detectable on just UHF.

I have been utilizing this 250 extensively for the past week. I have to say that I am pleased with the relative sensitivity, but still doesn't have the audio quality of my former 250 (1978 vintage).

What happened to quality control at Electra? Are they foregoing old standards just to promote television and radio advertising? I feel sorry for new scanner owners who must go through the same problems that I went through, but a "green" person might just accept these maladies and never even know that the radio is not supposed to act this way.

I would like to know what other members have experienced with problems similar, namely newer 250's and the like.

I must state that all correspondence with Electra people has been very understanding, and that their willingness to alleviate the problem is beyond reproach.

Will Sperling (IL-116)
Westmont, Illinois

To the editor:

This letter is long overdue, and I am sorry I just haven't had time to write. First of all, congratulations on becoming the RCMA editor. Having been involved in that earlier, I know how much time it takes. The Newsletter looks good, and you're doing a fine job.

I've noticed, over the past many months, several mentions in the Business/News Media column of Metro Traffic Control. Since I am not only an RCMA member, but also Network News Director of Metro Networks, the parent company of Metro Traffic Control, perhaps I should clear up some misconceptions.

Metro Traffic Control currently operates in four markets: our home market of Baltimore, Washington, DC, Dallas-Ft. Worth, and Houston. We expect to open in three more markets in the South and West shortly. In each market we operate our own UHF repeater system, linking our studio with the mobile units. The studio is then linked with the radio stations via special equalized broadcast telephone lines and/or UHF link distributor systems.

At this time we are exploring 800mHz systems for possible use in both our new and existing markets. Our communications systems are not limited to our fixed UHF repeaters in each city. We also operate a special UHF repeater and associated portables on a license valid anyplace in the country; additionally, we have a variety of UHF, VHF mobile and portable mobile telephones which are used on a daily basis. Our communications package is rounded out with the use of both tone and voice pagers throughout the system.

It may be of interest to RCMA members that the majority of major news facilities (wire, tv, radio, etc) use mobile telephones on a regular basis not only for administrative communications, but also for actual coverage of news events.

John Pilger (MD-006)
Severn, Maryland

COMMUNICATIONS PROFILE

RCMA, P.O. Box 216, Willow Grove, PA 19090

This column is for special projects that explain various radio systems in detail. Frequencies and radio codes of not only municipal agencies and certain federal government agencies may be listed, but also large businesses and corporations. The contribution must be lengthy enough that publishing it in one of the regular columns would not be possible due to length. If you are inclined to submit a report as the one below appears, please follow No. 9 in the inside front cover of the newsletter.

SANTA CLARA COUNTY TRANSIT DISTRICT SYSTEM

From Chuck O'Connor (CA-SC-017):

The transit district uses five radio channels at this time:
488.6375 Channel 1
488.6975 Channel 2
488.8375 Channel 3
488.7375 Channel 4 (also used by Pacifica PD)
489.0375 Channel 5

Channels 1 through 4 are used by buses, supervisors, maintenance and top "brass." The channels are used in zones corresponding to the channel number. As a unit crosses into a different zone, it must change channels. Channel 5 is not available to the buses; it is mainly used as a second channel by everyone else.

You will hear a unit say "code 6 to 5" or "10-99 to 5" when they want to use channel 5. Also, security units use all five channels and the security chief (31A10) also has a second radio on 151.055.

Since the map below is hard to read streets in the zones for each channel, the approximate borders for each zone are listed.

ZONE 1--Saratoga Avenue, Kiely Boulevard, Bowers Avenue, north to Menlo Park terminal.

ZONE 2--Union Avenue, Bascom Avenue, Naglee Avenue, Alameda, Santa Clara Street, Alum Rock Avenue, north to Zone 1 boundary.

ZONE 3--Cottle Road, Ford Road, north to Zone 2 boundar.

ZONE 4--Everything south of Zone 3 south boundary. South county (Morgan Hill-Gilroy). Dial-a-ride also operates on this channel.

Radio identification numbers are as follows:

The call sign for County Transit is KVZ 588.

Coaches are assigned "block numbers" as radio ID. The block number is a combination of a route number and a schedule number. The schedule number indicates what yard the coach is from. A block number would be something like "2228" or "381." The last two digits are the schedule number.

1 through 19 indicate Central terminal, 20 through 39 indicate Chaboya Station terminal, 40 through 69 indicate both north terminal and south terminal, 70 through 99 indicate Agnew terminal.

There always will be two digits in the schedule number (01, 45, 73, etc.), but the route may be a single digit, indicating an express route.

Maintenance units are "Mobile one," etc.

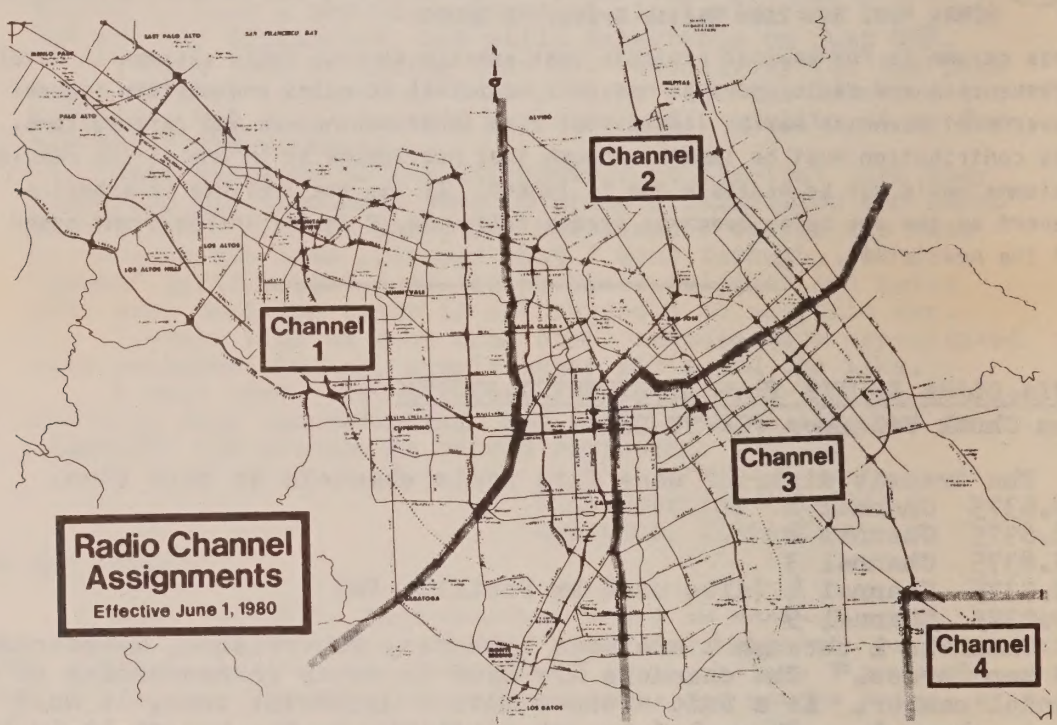
Security units are "B" units (except the chief--he is 31A10 or just A-10).

The road supervisors are X-units or "77X--".

The Transit District brass are designated as A units using A-1 through A-10.

Terminal superintendents are N-1, N-2, C-1, C-2, G-1, G-2, H-1, H-2, S-1 and S-2.

The main 10-codes used by the district are about the same as most PDs use.



ASSOCIATION OF NORTH AMERICAN RADIO CLUBS

NEWS HIGHLIGHTS

ANARC is a federation of the most responsible, well established radio listening clubs in North America. RCMA attained Full Member status in ANARC in 1977. For a list of the ANARC Member and Associate Member clubs send a self-addressed, stamped business size envelope with your request to the address below. For an annual subscription to the monthly "ANARC Newsletter" send $3.50 to: ANARC, 557 N. Madison Ave., Pasadena, CA 91101.

Dec 27

Colorado Association of DXers meeting at 7 p.m. at the home of Rob Harrington, 3181 South York Street, Ebglewood, CO 80110.

Jan 2

Beginning of World SW Listeners Club All Bands Monitoring Contest.

Paid Advertisement

CODE 20 RADIO DIRECTORY™

- State/County Public Safety 2-Way Radio Systems
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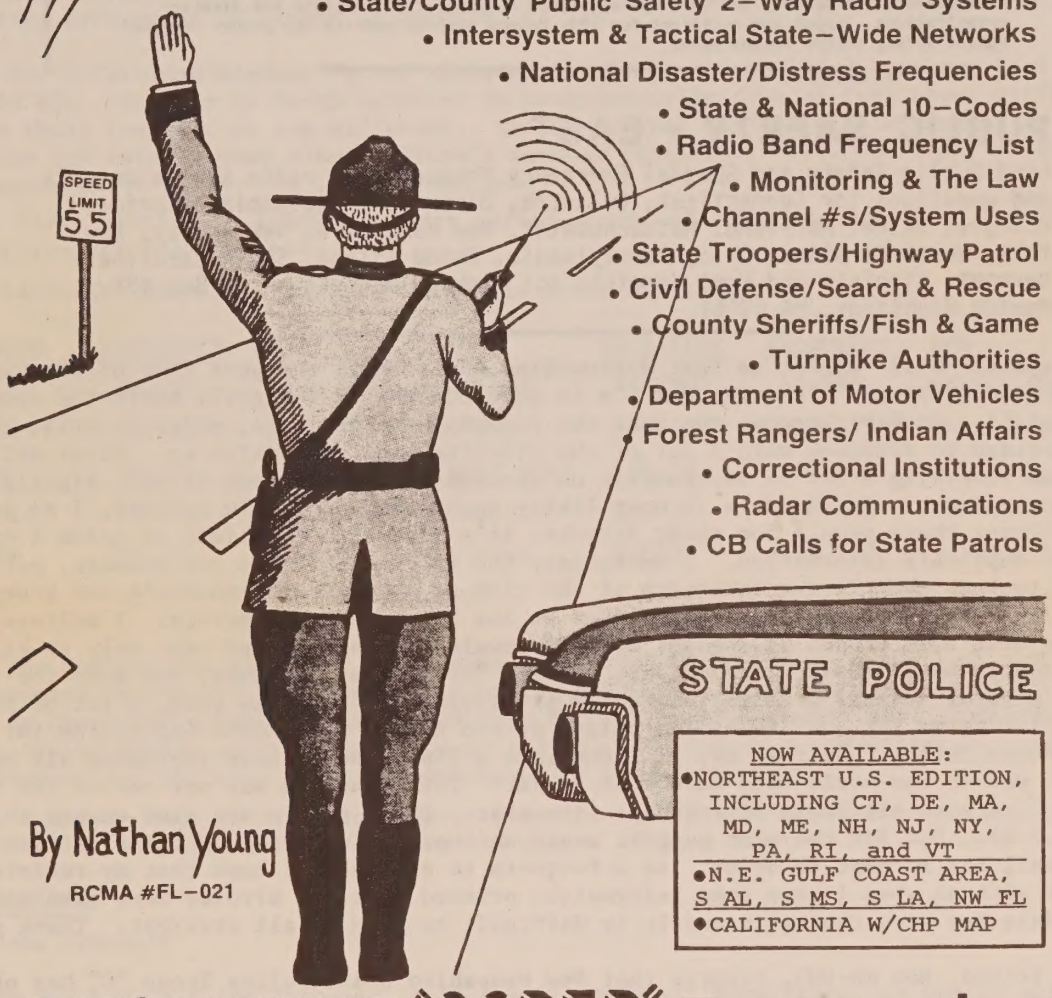
- State Troopers/Highway Patrol
- Civil Defense/Search & Rescue
- County Sheriffs/Fish & Game
- Turnpike Authorities
- Department of Motor Vehicles
- Forest Rangers/ Indian Affairs
- Correctional Institutions
- Radar Communications
- CB Calls for State Patrols



By Nathan Young
RCMA #FL-021

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- CALIFORNIA W/CHP MAP

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PERSONALLY RESEARCHED AND CODED FREQUENCY LISTS FOR MONITORS OF STATE AND COUNTY PUBLIC SAFETY RADIO, INCLUDING UNIQUE CODE INDEX. THE EDITOR, MR. NATHAN B. YOUNG, IS A FORMER TV NEWSREEL CAMERAMAN WHO HAS BEEN MONITORING PUBLIC SAFETY RADIO SINCE 1951. THESE LISTS ARE NOT FCC PRINT-OUTS. THIS NEW PUBLICATION PRESENTS CURRENT, DETAILED INFORMATION IN A UNIQUE FORMAT. STATES CURRENTLY AVAILABLE: CT, DE, MA, MD ME, NH, NJ, NY, PA, RI & VT (NORTHEAST U.S. EDITION CONTAINS ALL 11 STATES); SPECIAL NORTHEAST GULF COAST AREA LIST; AND SPECIAL CALIFORNIA EDITION WITH CHP MAP. OTHERS ARE NOW BEING PROCESSED, AND WILL BE READY SOON.

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(ARE INVITED)

Public Safety

This column is for reporting Public Safety and Special Emergency frequency information, radio system details, radio codes, dispatch areas, unit numbering systems, etc. for police, sheriff, fire, forestry (except USFS), fish and game, highway patrol, state police, prisons, prisoner work camps, local government, highway & street maintenance, port authority/bridge maintenance, animal control, ambulances, paramedics, hospitals, life guards, ski patrol, search & rescue, flood control, civil defense and disaster organizations. Input and questions for this column must be sent to the proper regional Public Safety editor listed below.

PUBLIC SAFETY - EAST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Connecticut, Delaware, District of Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia and West Virginia to: Richard Barnett, P.O. Box 428, Newton Highlands, MA 02161.

Hello again! Well, winter is fast approaching and with it the best time of the year for scanner monitoring. I'm sure that I'm in good company as I eagerly await the season's first snowfall. Anyway, because the past two columns were of large, major reports, this month I decided to dispense with a lot of the tid-bits that have piled up. First off, I have been receiving a lot of information on systems which have been already highlighted in previous columns. As the data is most likely being sent in by new members, I am in no way criticizing these people for their efforts; it's just with the limit on space I cannot print such duplicate information. I appreciate the efforts of these new members, yet I just want them to know that in the interests of the club as a whole, if you don't see your (full) work reprinted in the newsletter expect that it has been discussed before. I believe that one of the best buys around is the set of RCMA newsletter back-issues.-not only to find out what previously has been analyzed in past "Public Safety East" columns, but also for the wealth of general scanner information that's available. In the same vein, a lot of people have been asking me for such things as a list of the entire unit numbering system for the New York State Police. Believe me, if I had such a list I would have reprinted all or part of it, but who in the world does have such a list? This question was not out of the ordinary, for I receive all sorts of requests like that. These people are kind enough to enclose S.A.S.Es., but for the most part it would be impossible to answer these letters- if I can I shall try my best to do so. As a footnote to all this, I hope that my readers will be patient with me when I have some information printed that has already been seen before. A lot of data has been coming in and it is difficult to keep it all straight. Thank you.

A good friend, Bob NH-003, reports that New Hampshire State Police Troop "C" has obtained a new frequency of 45.180. N.H. State Police Troop "E" has similarly aquired 45.46. New Hampshire has recently incorporated the use of aircraft to clock autos on their highways. The operations are being conducted on 44.82 (car-to-car) and on the two new frequencies. Unit calls for the planes are "36" or "714". Eddie (NY-041), a very conscientious contributor -unfortunately I can't refer to him every month though-, writes that the Nassau County Police in their 4th and 5th precincts have walkie-talkie operations on 477.2125. New York City Fire Department investigation teams on 460.575. A seemingly fascinating frequency would be 471.1125 which Eddie reports to be the New York City Police Communications Division. Eddie would like to know the frequency and function of the New York State EnCon Police and their location. He also thanks all those who responded to his request for data. Finally a couple of other notes from Ed: Nassau County South-West Fire Battalions are on 46.20. Also new LODI-New Jersey Police frequency of 154.73.

NORTH CAROLINA

From Gary (NC-013)

The North Carolina State Highway Patrol communications system is controlled from seven radio stations located throughout the state. The state is divided into eight different troops and within each troop there are several districts. Example: Buncombe County is in "G" troop and is district number four. So a trooper that was stationed in Buncombe County would have a radio number that started with G-4 and then would end with a two digit number that identified the trooper. Example; G-441. Therefore it is possible to identify where a trooper is stationed by knowing his radio number. Also the rank of an officer can be determined by his radio number. All first sergeants' radio numbers end in 11. Example; G-311, A-211, etc. All of the line sergeants' numbers end in either 22, 23, 24 or 25. All of the commissiond officers, Lieutenants through the Colonels have radio numbers that start with a one (1) and they have no troop prefix. Example: the commanding officer of "G" troop, a captain, is 114.

The North Carolina Highway Patrol operates mainly on the low band spectrum from 42.52 to 42.80 MHz. However as North Carolina is geographically divided into three different regions their frequencies are different. In the coastal and the middle regions of the state the low band is used almost entirely without repeaters. When you come to the mountain region where I live the picture changes.

At the radio station in Asheville which serves seventeen counties: low VHF, high VHF and UHF frequencies are used.

NORTH CAROLINA HIGHWAY PATROL - Asheville Radio Station:

CALL SIGN	FREQUENCY	USE	CALL SIGN	FREQUENCY	USE
KIQ822	42.620	Base for local cars	KA 4407	42.780	mobile input-rep.
KQL720	42.620	Base for west cars	KSB 57	456.075	local & west rep.
KEL394	42.620	Base for far west cars	KHT 55	467.200	all cars mob. rep.
KIB898	42.620	Base for east cars	KJZ 37	155.505	far west mob. rep.
KIB899	42.620	Base for north cars	KIQ822	155.190	Inter-county rep.
KIQ822	155.370	far west repeater			

As you can see one must have a tri-band scanner to be able to cover all of the action. The coverage on the 467.200 repeater is exceptional as it is located on top of Mt. Michell which is the highest mountain in the eastern United States at 6,894 feet above sea level. I have copied mobile units as far away as 150 miles. Also when commercial jets pass over the mountain you can hear their transmissions to Atlanta Center.

Editor's note: This is our first report from N.C. and I hope Gary will continue to send us whatever he can for his state. Thanks Gary!

PENNSYLVANIA

From John (PA-035)

Here you have all the info you could ask for to start monitoring the public safety band in Montgomery County, Pennsylvania, John writes. In return please ask your readers to send any information they may have on the Pennsylvania State Police Radio.

MONTGOMERY COUNTY POLICE UNITS

13	Detective	51	U. Gwynedd	78	Skippack
14	Coroner	52	Norristown	79	Marlboro
19	Sheriff	53	Lansdale	81	Red Hill
25	L. Moreland	54	Bridgeport	82	Schwenksville
26	Cheltenham	55	Hatfield Twp.	83	Pennsburg
27	Bryn Mawr	56	U. Merion	84	Limerick
28	Springfield	57	Hatfield Boro	*	
29	Abington	58	Valley Forge Park	86	Royersford
31	Rockledge	59	Towamengin	87	U. Hanover
32	Whitemarsh	61	L. Salford	88	L. Pottsgrove
33	Jenkintown	62	W. Norristown	89	New Hanover
34	L. Merion	63	Franconia	91	Douglass
35	U. Moreland	64	Worcester	92	U. Pottsgrove
36	Narberth				

PUBLIC SAFETY - EAST CONTINUED

37 Hatboro
38 W. Conshohocken
39 Horsham
41 Upper Dublin
42 Conshohocken
43 Ambler
44 Plymouth
45 L. Gwynedd
46 Whitpain
47 Montgomery
48 E. Norriton
49 North Wales
65 Souderton
66 L. Providence
67 Telford
68 U. Providence
69 Salford
71 U. Salford
72 Collegeville
73 L. Frederick
74 Trappe
75 U. Frederick
76 Perkiomen
77 Green Lane
94 Pottstown
96 W. Pottstown
99 Spring City

400 CODE ZERO VAN
401 CODE ZERO COMMAND POST
15 Radio Repair

MONTGOMERY COUNTY POLICE, FIRE, & AMBULANCE RADIO

Montgomery County, Penna., is bordered to the east by the City of Philadelphia, to the west by Berks County, to the north by Lehigh County & Bucks County, and to the south by Delaware County and Chester County. Due to high police & fire traffic in eastern Montgomery Co., some Twp. police & fire dept. officals have gone from County dispatch to a private frequency. Most of central & western Montgomery County police & fire traffic & all Montgomery County Emergency ambulance traffic is handled by the Montgomery County Communications Board. Every police station, Fire station, & Ambulance station is issued a county dispatch number. Station 28 on police band would be Springfield Police. 28-5 on police band would be Springfield Twp. Police Dept., car # 5. Station 311 on ambulance band would be Springfield Twp Ambulance. 311-2 would be Springfield Twp Ambulance #2 if the # was called over ambulance band. Station 600 on high band fire would be Flourtown Fire Co. & #605 would be Station 600, unit 5, Flourtown Fire Co. 43-2 on Montgomery County Fire Low Band would be Plymouth Fire Co., unit #2.

MONTGOMERY CO. POLICE RADIO

45.460	POLICE BASE TO POLICE CAR	CH. 1	EMERGENCY INFO.
45.340	POLICE CAR TO POLICE BASE	CH. 1	EMERGENCY INFO.
45.260	POLICE CAR TO POLICE CAR	CH. 2	
45.780	POLICE BASE & POLICE CAR	CH. 3	INFO. ON VEHICLE REG. ECT.

MONTGOMERY CO. AMBULANCE RADIO

46.040	AMBULANCE DISPATCH, AMBULANCE TO BASE, BASE TO AMB., AMB. TO HOSPITAL, BASE TO AMBULANCE. F-1	
45.920	AMBULANCE TO AMBULANCE BAND. F-2	
45.960	SECOND ALARMERS F-3	BUCKS COUNTY AMBULANCE TO MONTGOMERY COUNTY AMBULANCE.

MONTGOMERY COUNTY FIRE BAND

154.130	HIGH BAND FIRE	F-1	DISPATCH & FIRE GROUND TRAFFIC
33.700	LOW BAND FIRE	F-1	DISPATCH & FIRE GROUND TRAFFIC
33.660	LOW BAND FIRE	F-2	FIRE GROUND TRAFFIC
33.600	FIRE POLICE		

MONTGOMERY COUNTY FIRE SYSTEM

27 NORRISTOWN
27-A NORRIS
27-B MONTGOMERY
27-C HUMANE
27-D FAIRMOUNT
27-E HANCOCK
28 NARBERTH
29 BARREN HILL
31 BRIDGEPORT #1
32 BRIDGEPORT GOOD WILL
33 CENTER SQUARE
34 COLLEGEVILLE
35 CONSHOHOCKEN #2
36 WASHINGTON #1
37 NEW HANOVER TWP.
38 EAST GREENVILLE
39 GEORGE CLAY
41 NORTH PENN
42 GREEN LANE
43 PLYMOUTH
44 HARMONVILLE
45 SPRING MILL
46 JEFFERSON
47 KING OF PRUSSIA
48 SWEDELAND
49 SWEDESBURG
51 LINFIELD
52 LOWER FREDERICK
53 LOWER PROVIDENCE
54 LIMERICK
55 MONT CLARE
56 LINCOLN
57 WEST END
58 SANATOGA
59 RINGING HILL
61 NORRITON
62 NORTH PENN
63 OAKS
64 TELFORD DIVING
65 PENNSBURG
66 PERKIOMEN
67 GILBERTSVILLE
68 SASSAMANVILLE
69 POTTSTOWN
71 RED HILL
72 TYLERSPORT
73 SCHWENKSVILLE
74 PERSERVERENCE
75 TELFORD FIRE
76 TOWAMENCIN
77 TRAPPE
78 UPPER SALFORD
79 UPPER POTTSGROVE
80 WEST POINT

21 BELMONT HILLS
22 BRYN MAWR
23 PENN WYNNE
24 GLADWYNE
25 CYNWYD
26 ARDMORE
82 SECOND ALARMERS
83 WORCESTER
84 HUMANE-ROYERSFORD
85 FRIENDSHIP
86 SKIPPACK
87 UPPER FREDERICK
88 FORT WASHINGTON
89 HARLEYSVILLE

CHELTENHAM TWP. FIRE

1. GLENSIDE
2. LaMONT
3. ELKINS PARK
4. CHELTENHAM
5. OGONTZ

100 ABINGTON
150 GLENSIDE
200 McKINLEY
250 LaMONT
300 WELDON
350 ELKINS PARK
400 EDGE HILL
450 CHELTENHAM
500 ROSLYN
550 OGONTZ
600 FLOURTOWN
650 WYNDMOOR
700 ORELAND
750 AMBLER
800 HUNTINGTON VAL.
850 JENKINTOWN
900 ROCKLEDGE
950 HATBORO
1000 WILLOW GROVE
1050 HORSHAM
1100 BRYN ATHYN
1240 FAIRMOUNT-LANSDALE
1260 COLMAR
1270 NORTH PENN FIRE ALARM CENTER
1280 HATFIELD
1500 MONTGOMERY CO. UNITS
1600 SECOND ALARMERS

MONTGOMERY CO. AMBULANCE

301 S.P.C.A.
303 MONTCO. C.D. RESCUE
304 MONTGOMERY HOSPITAL
305 NORRISTOWN STATE HOSPITAL
306 NORRISTOWN CABULANCE
308 PLYMOUTH
309 MONTCO. REGIONAL
311 SPRINGFIELD
312 WASHINGTON
313 NARBERTH MED. SERVICE
314 GEORGE CLAY
315 L.MERION POLICE
316 GOODWILL OF BRIDGEPORT
317 LAFAYETTE
318 WHITEMARSH
319 DELAWARE VALLEY
321 W.NORRITON
322 L.PROVIDENCE
323 SPRING-FORD
324 TRAPPE
325 FRIENDSHIP OF ROYERSFORD
326 SKIPPACK
328 GREEN LANE
329 GOODWILL OF POTTSTOWN
331 L.FREDERICK
338 TELFORD DIVING UNIT
339 SOUDERTON
341 NORTH PENN GOODWILL
344 HARLEYSVILLE
345 LANSDALE MED.
346 FAIRMOUNT OF LANSDALE
351 AMBLER
352 HORSHAM
353 SECOND ALARMERS
354 ENTERPRISE OF HATBORO
355 BRYN ATHYN
356 JENKINTOWN POLICE
357 EMERGENCY CARE UNIT
358 CHELTENHAM POLICE
359 ABINGTON
369 U.PERKIOMEN
397 WEST END PHOENIXVILLE
398 MONTCO. AMB & RESCUE
399 RED HILL C. D.

MONTGOMERY COUNTY FIRE RADIO LOCAL FREQS.

154.070 Abington Fire RFD Band F-2
33.760 Conshohocken-Plymouth Fire F-2
154.445 Cheltenham Fire F-1
154.280 Huntingdon Valley & Bryn Athyn
154.175 Lansdale Fire
33.840 Lower Merion Fire F-2
154.025 Oreland Fire F-2
153.770 Roslyn Fire Police
154.370 Norristown Fire

MONTGOMERY COUNTY POLICE RADIO LOCAL FREQS.

39.180 ABINGTON POLICE
155.145 AMBLER CAR TO CAR
158 850 CHELTENHAM POLICE
154.115 HATFIELD POLICE
45.580 HORSHAM POLICE
155.640 LANSDALE POLICE
155.865 LOWER GWYNEDD POLICE
460.275 LOWER MERION POLICE
154.995 MONTGOMERY POLICE
501.0625 NORRISTOWN CH. 1
501.1125 NORRISTOWN CH. 2
500.9875 NORRISTOWN CH. 3
45.940 POTTSTOWN POLICE
159.210 READING POLICE
154.845 SPRINGFIELD POLICE
45.620 TREDYFFRIN POLICE
39.360 UPPER DUBLIN POLICE ...F-2..39.50.
154.740 UPPER GWYNEDD POLICE
154.815 UPPER MERION POLICE
39.280 UPPER MORELAND & LOWER MORELAND
39.340 UPPER MORELAND POLICE HAND SET
45.400 WHITEMARSH POLICE

MONTGOMERY COUNTY

10-0 Caution
10-1 Unable to copy—change location
10-2 Signal is good
10-3 Stop transmitting
10-4 Acknowledge transmission
10-5 Relay
10-6 Busy—stand-by unless urgent
10-7 Out of service at (location and/or telephone number)
10-8 In service
10-9 Repeat last transmission
10-10 Fight in progress
10-11 Dog case
10-12 Stand-by (stop)
10-13 Weather and road report
10-14 Report of prowler
10-15 Civil disturbance
10-16 Domestic trouble
10-17 Meet complainant
10-18 Complete assignment quickly
10-19 Return to_____(station)
10-20 Location
10-21 Call_____by telephone
10-22 Disregard
10-23 Arrived at scene
10-24 Assignment completed
10-25 Report (in person) to_____
10-26 Detaining subject, expedite
10-27 Drivers license information
10-28 Vehicle registration information
10-29 Check records for wanted
10-30 Illegal use of radio
10-31 Crime in progress
10-32 Man with gun
10-33 EMERGENCY
10-34 Riot
10-35 Major crime alert
10-36 Correct time
10-37 Investigate suspicious vehicle
10-38 Stopping suspicious vehicle (give complete description before stopping)
10-39 URGENT—use light and siren
10-40 Silent run—no light or siren
10-41 Beginning tour of duty
10-42 Ending tour of duty
10-43 Information
10-44 Request permission to leave patrol_____for_____
10-45 Animal carcass in_____lane at_____
10-46 Assist motorist
10-47 Emergency road repairs needed
10-48 Traffic standard needs repair
10-49 Traffic light out
10-50 Accident—F, PI, PD
10-51 Wrecker needed
10-52 Ambulance needed
10-53 Road blocked
10-54 Livestock on highway
10-55 Intoxicated driver
10-56 Intoxicated pedestrian
10-57 Hit and run—F, PI, PD
10-58 Direct traffic
10-59 Convoy or escort
10-60 Squad in vicinity
10-61 Personnel in area
10-62 Reply to message
10-63 Prepare to make written copy
10-64 Message for local delivery
10-65 Net message assignment
10-66 Message cancellation
10-67 Clear to read net message
10-68 Dispatch information
10-69 Message received
10-70 FIRE ALARM
10-71 Advise nature of fire (size, type contents of building)
10-72 Report progress of fire
10-73 Smoke report
10-74 Negative
10-75 In contact with
10-76 En route
10-77 ETA (estimated time of arrival)
10-78 Need assistance
10-79 Notify coroner
10-80 Chase in progress
10-81 Breatherlizer report
10-82 Reserve lodging
10-83 Work school crossing at_____
10-84 If meeting_____, advise ETA
10-85 Delayed due to_____
10-86 Officer/Operator on duty
10-87 Pick up checks for distribution
10-88 Advise present telephone number of_____
10-89 Bomb threat at_____
10-90 Bank alarm at_____
10-91 Pick up prisoner/subject
10-92 Improperly parked vehicle
10-93 Blockade
10-94 Drag racing
10-95 Prisoner/subject in custody
10-96 Mental subject
10-97 Check (test) signal
10-98 Prison or jail break
10-99 Records indicate wanted or stolen

Next month we'll try to get to the State of Maryland, more on Pennsylvania -especially the Pittsburgh area.

PUBLIC SAFETY - CENTRAL

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alabama, Arkansas, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee and Texas to: Mike Redman, P.O. Box 1177, St. Charles, MO 63301.

Send material and questions for Illinois, Indiana and Wisconsin to: John Arendt, 327 Boulder Hill Pass, Oswego, IL 60543.

Greetings to all and welcome to my first column of 1981! We've a lot to cover so we'll get right at it. Many thanks to all of you who have written and sent column contributions. Remember, it takes a few months for these to appear, so be patient. Thanks again and keep the mail coming in! (Self addressed stamped envelopes are appreciated) On to House Bill HR7747. I hope you all have written for a copy and have commented to your Congressmen. HR7747 deals primarily with 'subscription telecommunications'. However, you might be liable under HR7747 even if you build your own satellite receiver for "cable" television, even if you only use it in the privacy of your home. While pirating such transmissions for resale is already a violation of the Communications Act, Section 605, this bill seeks to take the privilege of an ambitious person to build his own receiver and receive such signals unaided by a costly cable company. If this bill passes, what's next...unauthorized reception of signals above 30 Mhz in general? Think about that as you write your congressman. Be sure to get your copy of HR7747!

The PS-Central Chapter Summary

The Ohio Valley Chapter: Contact Dave Nugent (IN-002), 2542 Birk Ave., Jasper Indiana, or call him at 812-482-2352.

The Chicago Area Chapter: Contact Ed Sirovy (IL-004), 311 S. Williams St., Westmont, Illinois, 60559; or call Ed- 312-969-2856.

The St. Louis Area Chapter: Contact me at the address above, or call me at 314-946-4331.

Like to form a chapter in your area? Need help to get one started? Don't know where to go for help? Write or call Ed Sirovy of the Chicago chapter, and in no time you'll have a chapter off the ground as active and well run as the Chicago group.

KANSAS

From ANDY (KS-014) has some updated information on his Johnson County Kansas information of October, 1980:
Leawood is now dispatched by the Southwest District, Johnson Co., on 158.775 base, 159.030 mobile. Each of the communities that is dispatched by the Northwest District has its own intercity frequency for car to car use. To change to that channel, 10-85 is the code. Frequencies known are Mission- 159.000, Merriam- 159.105. Andy would like the frequencies for Roeland Park, Fairway, Westwood, if you have these, let us know. Shawnee has the Northeast District channel in their radios (158.730). Johnson County Park units are using 159.300.

MICHIGAN

From DAVID (MI-047) comes this contribution from Grand Rapids area:

Grand Rapids City, KQB234: Police

F1	155.655	Base/Mobile	154.770	"Car to Repeater"
F2	154.860	Battle Creek B/M	154.950	"Car to Repeater"
F3	155.790	Base/Mobile		
F9	154.740	Mobile		

Grand Rapids Fire: KQC754
153.950 (Mobile), 154.130 (Base/Mobile), 154.370 (Base/Mobile)

Wyoming City PD: KQG424

F1	155.520	Base/Mobile	F3	156.030 car to car
F2	156.210	Base/Mobile		

Kent County: KQG608

F1 155.010 Base/Mobile F3 155.070 Base/Mobile
F2 154.890 Mobile
Kent County Fire: KQS490
F1 154.070 Base/Mobile
City of Kentwood; Police: KZF702
F1 155.040 Base/Mobile
City of Grandville; Police: KJS804
F1 155.520 Base/Mobile F2 155.835 Base/Mobile
East Grand Rapids; Police: KAU326
F1 154.800 Base/Mobile
Muskegon County; Police: KQA918
F1 155.490 Base/Mobile F2 154.755 Base/Mobile
Allegon County; Police: KQB911
F1 155.550 Base/Mobile (Shared with Mecosta County, KJO657)
Ottawa County; Police: KZZ374
F1 154.725 Base/Mobile F3 155.910 Base/Mobile
F2 154.785 Mobile F4 155.970 Mobile
Newaygo County; Police: KQG565
F1 155.130 Base/Mobile
Montcalm County; Police: KQB397
F1 155.610 Base/Mobile
Holland City; Police: KQB229
F1 155.415 Base/Mobile
Grand Rapids Ambulances:
155.160 Mercy (KQE517)
155.280 Bud's (KDK711)
Many thanks, David!

IOWA

MIKE (IA-011) has provided this detailed listing for the Scott County/Davenport area; starting with Scott County:
Dispatch Center: Basement, County Court House
Tower Location: West Lake Park
Quad City Net: 155.370 Base KGT566
Mobiles:
F1 156.210 Base/Mobile Operations KUO255
F2 155.580 Base Information KUO255 155.415 Mobile
F3 155.790 Repeater LEA KUX297
F4 155.475 Base/Mobile AID KGT566
Portables: KUO255
F1 155.580 Base
F2 155.850 Portable
F3 156.210 Base/Portables Operations
F4 155.475 Base/Portables Aid
Low Band:
F1 37.160 Base/Mobile Operations KGT566
F2 37.100 Base/Mobile "37.10" KGT566
The Sheriff has a control point to Davenport PD:
Tac 1: 460.125, Tac 2: 460.150
Unit Numbering System:
This is a four digit system, where the first two numbers are a unique County designator, and the last two numbers are a car number or officer badge number. For example, 8207 is Scott County car 7.
Suffix A refers to a non-deputy unit: Park Rangers, Sheriff's Posse.
Air Units: 82-Air One/Two (Formal ID- 82-A1SD)

82-80 Eldridge Police Chief 101+ Police Officers
82-81 Long Grove Marshall
82-82 LeClaire Police Chief
82-83 Princeton PD Squad Car
82-84 Walcott PD Car
82-85 Blue Grass Police Chief 501+ Police Officers
Buffalo Police 401+ Police Officers

Thanks again, Mike!

MISSISSIPPI

We have a nice offering from Duane (MS-009):

District 3	Batesville	)	
District 6	Meridian	)	Station-Car 42.080
District 9	Brookhaven	)	Car- Station 42.300
District 1	Jackson	)	
District 5	Starkville	)	Station-Car 42.120
District 8	Gulfport	)	Car-Station 42.180
District 2	Greenwood	)	Station-Car 42.160
District 7	Hattiesburg	)	Car-Station 42.240

Statewide & Car to Car 42.020

The bases and cars us remoted transmitters, with links on the frequencies 451.550 and 456.550. Mississippi State Police Headquarters in Jackson has capability to talk from Jackson through any state channel directly without crospatch. State weigh scales use 155.460 and 154.695. Again, statewide capability at Jackson. Link frequency is 155.520. Intercity channels are 45.220 and 155.490, and these are statewide. Civil Defense uses 45.920 and 46.040. These can be controlled from Jackson. Governor's Security Net is a repeater operation on 453.925. The State Department of Forestry uses 151.145 and 151.475, both simplex; Marine Conservation Commission can be found on 45.10 and 45.22. Fish and Game units are heard on 45.00, and the Mississippi Power and Light Company uses 158.220.
Duane reports further that Gulfport PD uses 155.370 as main Police dispatch frequency, and "Coded Channel 2" is 155.415m using the DVP scrambling technique.
Hope this will stimulate some further information from Mississippi! Many thanks, Duane, for sharing these with us.

TEXAS

This month, the last installment on KEN PEHL (TX-003)'s Exciting Story on the Texas Highway Patrol:

Tentative Roster of Texas DPS Radio Stations
(subject to changes, corrections, and additions)

The following are the known or suspected primary DPS radio stations/offices across the state. For the purposes of this list, a primary radio station will be defined as a transmitter operated directly by a district office through the use of direct transmitter control or through the use of telephone line connection to the actual transmitter site. The purpose of this list is to differentiate between the main transmitters used by an office and those transmitters operated by radio remote control.

Location	Callsign	Identifies as:	Other comments
Abilene	KKC 674	Abilene	Primary xmtr
Abilene	WYV 274	?	? auxiliary xmtr?
Amarillo	KKI 412	?	
Austin	KKD 303	Austin	Primary xmtr/callsign
Austin	KKL 745	Austin	Auxiliary xmtr
Austin	KEV 491	?	?CLE xmtr?
Beaumont	KKE 469	?	
Bryan	KKV 232	Bryan	
Carta Valley	KDB 200	Del Rio	possibly a remote site/xmtr as located in Edwards Co. however, callsign is Del Rio main callsign

Childress	KDG 262	?	
Childress	KRT 818	?	
Corpus Christi	KZR 521	?	
Galallen (?)	KKC 784	Corpus Christi	Primary xmtr/callsign
Riviera	KLA 637	?	?auxiliary xmtr? or? remote site?
Dallas/Garland	KKA 603	Dallas	
Del Rio	KEW 981	?	
El Paso	KKD 400?	El Paso	license call sign uncertain, was primary callsign when on old low band.
El Paso	KKA 640	?	?possible CLE xmtr??
El Paso	WXT 665	?	
Hitchcock/ Galveston	KLA 926	?	unsure if this is primary station
Harlingen	KKA 596	?	unsure if this is primary station
Houston	KKC 588	Houston	primary xmtr/callsign
Spring	KCV 407	?	
Kerrville	KCS 508	Kerrville	
Lampasas	KFO 761	?	possibly obsolete license?
Nix	KGY 212	Lampasas	primary xmtr/callsign
Laredo	KAS 430	Laredo	primary xmtr/callsign
Laredo	KMA 804	?	
Lubbock	KKB 489	?	
Lubbock	KXE 555	?	
Crosbyton	WZC 509	?	this may instead be a remote??
Lufkin	KKH 775	?	unsure if this is primary station
McAllen	KVT 812	?	unsure if this is primary station
Midland	KXA 479	?	
Midland	KKS 896	?	
Mineral Wells	WXR 376	?	
Mineral Wells	KEP 588	?	unsure if this is primary station
Ozona	WZY 474	?	
Ozona	KSO 940	Ozona	primary xmtr/callsign
Pecos	KKD 397	Pecos	primary xmtr/callsign
Pecos	KFO 688	?	
Pierce	KUZ 831	Pierce	
San Angelo	KKA 451	San Angelo	
San Antonio	KKM 304	KKM 304	callsign of mobile command post can be used as temporary base anywhere in state if needed
San Antonio/ Elmendorf	KKI 413	San Antonio	primary xmtr/ callsign
Sulphur Springs/ Blossom	KJW 750	?	possible primary call
Sulphur Springs/ Howe	KCY 568	?	possible primary call
Texarkana	KYL 815	?	
Tyler	KKI 414	Tyler	
Victoria	KKQ 736	Victoria	
Waco	KXZ 546	?	
Waco	KKC 523	Waco	primary xmtr/callsign
Wichita Falls	KKE 241	?	
Wichita Falls	KZT 393	?	

The following are listings of known or suspected remoted secondary transmitters. The listed call letter are rarely , if ever, heard. The controlling stations call are more likely to be heard instead, that is to say, the main transmitter callsign is heard rather than the more appropriate control frequency's callsign. These listings are taken from POLICE CALL, Vol. 7.

Location Site	Callsign	Controlled by:	Located in:	Frequency
Adrian	KDL 966		Oldham Co.	155.460
Alanreed	KBW 859		Gray Co.	155.460

Alvin	KLA 926		Brazoria Co.	155.460
Beckville	KKR 920		Panola Co.	155.460
Benjamin	KVT 906		Knox Co.	155.460
Coldspring	WXY 320		San Jacinto Co.	155.460
Crane	KFB 585		Crane Co.	155.460
Cusseta	KYL 816	(may be primary??)	Cass Co.	155.460
Fairfield	KKY 731		Freestone Co.	155.460
Flynn	WYF 947		Leon Co.	155.460
Ft. Davis	KKE 225		Jeff Davis Co.	155.460
Gail	KKQ 431		Bordon Co.	155.460
Glen Rose	KCN 659		Somervell Co.	155.460
Glen Rose	KDT 55	(obsolete license??)	Somervell Co.	155.460
Glidden	KVY 672	Pierce DPS	Colorado Co.	155.460
Grapevine	KKQ 395	?Dallas DPS?	Tarrant/ Dallas Co.	155.460
Guadalupe Pass	KKE 225		Culberson Co.	155.460
Iraan	KFB 985	?Ozona DPS?	Pecos Co.	155.460
Jasper	KCY 569		Jasper Co.	155.460
Junction	KDG 756	Kerrville DPS	Kimble Co.	155.460
Loraine	WYV 276		Mitchell Co.	155.460
New Braunfels	KKR 920	Austin DPS	Comal Co.	155.460
Plainview	KUJ 618	?Lubbock DPS?	Hale Co.	155.460
Pontotoc	KFG 596	Lampasas DPS	Mason Co.	155.460
Rio Grande City	KBC 421		Starr Co.	155.460
Sierra Blanca	WXT 666		Hudspeth Co.	155.460
Temple	KOM 721	?Waco DPS?	Bell Co.	155.460

The following are listings of known or suspected remoted repeater stations that rebroadcast DPS mobiles transmitters on 154.680. These transmitters' callsigns are probably never heard. In the past few days some wonderfully good "tropo" openings have brought some of these stations in and it is believed some of these stations now have automated morse code ID'ers. Can anyone confirm this idea?

Location Site	Located in:	Callsign	Frequency
Adrian	Oldham Co.	KFR 30	159.09
Beckville	Panola Co.	KKM 24	159.09
Benjamin	Knox Co.	WAA 436	159.09
?Crane	Crane Co.	WFR 659	159.09
Flynn	Leon Co.	WAC 348	159.09
Ft. Davis	Jeff Davis Co.	KKC 70	159.09
Glen Rose	Somervell Co.	KDT 55	159.09
Grapevine	Tarrant/ Dallas Co.	KKY 98	159.09
Plainview	Hale Co.	WOA 62	159.09
Temple	Bell Co.	KKA 62	159.09
Alanreed	Gray Co.	KDR 44	159.21
Coldspring	San Jacinto Co	WXY 320	159.21
Fairfield	Freestone Co.	KLO 35	159.21
Gail	Bordon Co.	KKZ 24	159.21
Guadalupe Pass	Culberson Co.	KKC 71	159.21
Jasper	Jasper Co.	KEX 48	159.21
Junction	Kimble Co.	KKW 96	159.21
Loraine	Mitchell Co.	WYV 275	159.21
New Braunfels	Comal Co.	KTO 68	159.21
Pontotoc	Mason Co.	KRQ 80	159.21
Rio Grande City	Starr Co.	KBW 56	159.21
Sierra Blanca	Hudspeth Co.	WXT 666	159.21

Many, Many Thanks to Ken for that fine series of articles. In the next few months, we'll catch up with David Litsinger's comprehensive study of Texas Counties, then next Spring we'll have another special from Ken: Texas Parks and Wildlife!

On to John Arendt and his timely information on Illinois, Indiana, and Wisconsin:

Greetings from the "Land of Lincoln". Welcome to winter and "Happy Holidays". (Christmas, New Years, Hannukah, etc.) to all. I hope that Santa Claus has been good passing out new scanners, accessories, etc. to all.

As January is the toughest month weather wise in this area, I think that it is appropriate to review the highway maintainence freqs. for the various states that I'm responsible for covering:

1. CHICAGO, IL AREA (Dist. 10 - State of IL) (Previously published)
   Expressway Maintainence 150.995MR (156.12 input)
   Expressway Patrol Vehicles 151.07 MR (156.06 input)
   and 151.10 MR (156.045 input)
   An additional freq. 453.70 MR is also available.

2 ILLINOIS TOLLWAY
   Simulcast on 453.30 MR, 453.625 MR and 453.80 MR

3. BALANCE - STATE OF IL (Previously published)
   47.30 B/M, 47.38M : Dist. 1 - Schaumburg, Dist. 4 - Peoria,
   Dist. 9 - Carbondale
   47.14 B/M, 47.38 M : Dist. 2 - Dixon, Dist. 3 - Ottawa
   47.34 B/M, 47.30MM : Dist. 5 - Paris, Dist. 8 - Fairwiew Hts.
   47.38 B/M, 47.30 M : Dist. 7 - Effingham

4. INDIANA STATE HWY. COMMISSION (Previously published)
   47.28 Base to Mobile (main dispatch)
   47.36 Mobile to Base, Base to Base

5. WISCONSIN HIGHWAY DEPT. (Previously published)
   47.32 Rptr. Out (151.04 input)

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With some help from Mike Scheel (IA-011) and an old copy of an "Action Radio" computer run, I've come up with some county hwy. freqs. for IL and several of the southern WI counties. Remember, this list is far from complete and is probably not completely correct. It's a start in the right direction.

IL counties first:

33.06 Menard, Scott
33.10 Edgar
37.90 Clinton, Ford
37.94 Randolph
37.96 DuPage
37.98 Cass
45.68 Mason, LaSalle (?)
45.70 (?) Whiteside (This freq. allocated for police use - possibly 45.72?)
45.72 Grundy
45.76 Kane
45.80 St. Clair
45.84 Kendall
150.995 Montgomery, Pulaski, Putman
151.125 Jefferson (156.06 in), Union, Schuyler, Stephenson
151.01 McLean (156.045 in), Winnebago
151.055 Bond, Kankakee, Perry, Richland
151.07 Christian (156.24 in)
151.085 Boone, Logan, Pike
151.115 White (156.045 in), Morgan (156.075 in), Dewitt
156.045 Fulton (159.135 in)
156.06 Henry (159.015 in), Jackson
156.075 Knox (159.12 in)
156.105 Ogle (159.00 in)
156.12 Woodford (159.00 in), Carroll, Macon
156.18 Marshall (159.075 in), McDonough, Crawford

156.195 Stark (159.045 in), Moultrie
156.24 Wayne (159.075 in), Greene, Hancock
159.06 Vermillion
159.12 Clay, DeKalb
159.135 Jasper
159.165 Mercer
159.18 Marion, Saline, Shelby
453.05R Livingston
453.40R Peoria
453.45R Madison
453.50R Piatt
453.75R & 453.95R Cook
453.85R Lake

Some of the "known" IL county hwy. depts. listed in the "Police Call" include:
154.98 Rock Island
453.05R Tazewell
155.76 Will (153.80 in)

Now for some of the southern WI counties:
Greene 156.18 (159.075 in)
Grant 150.995 (159.06 in)
Dane 151.055 (156.12 in)
Portage 151.01 (prev. publ.)

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Time to move on to the balance of the month's mail.

ILLINOIS STATE POLICE - TOLLWAY DIST. 15 The 42MHZ low-band mobile radios are being phased out of service. High-band mobiles will be used. All mobile units now have 155.460 ("Channel 7" or "HF4") plus a new car-car freq. (yet unknown) installed.

PUTNAM COUNTY, IL S.D. Mike (IA-011) advises that a mobile rptr. has now been placed into service on 154.74. (This editor has observed same. The freq. is quite active - now that 3 different SD's are observed here.)

MASON COUNTY, IL S.D. SWITCHES TO HIGH BAND (IA-011) Mike also notes a new mobile rptr. on 155.58 (input unknown at present).

ROCK ISLAND, IL AREA NEWS Mike (IA-011) has sent in several items and I'll list them below:

1. Some new freqs. now in use: E. Moline P.D. 460.025R
   Moline P.D. 460.300R and 460.400 simplex (the latter freqs. for mobiles and H/H units)
   Rock Island City P.D. soon to move to UHF. The present VHF freqs. (155.61) to be retained.
2. "RI-COMM" has budgetary problems. If plans go ahead to charge the "users", several villages will drop out of the system.
3. Plans to start a paramedic program in the Quad Cities, IL area have been stalled due to lack of interest. (Rock Island City has expressed no plans to participate.)

NORTHWEST CHICAGO SUBURBAN AREA NEWS Brandt (IL-084) sent in a lengthy list of freqs. he regularly monitors. Some of the highlights include the following:

Arlington Heights	P.D.	470.3625	F3 Cars - 1100 series
		470.4375	F1 Station - 3600
Buffalo Grove	P.D.	470.3625	F3 Cars - 4100 series
		470.4375	F1 Station - 4600
DesPlaines	P.D.	155.745	Dispatch
	F.D.	154.340	KBU 640 Dispatch
		154.265	KBU 640 Mutual Aid
Mount Prospect	P.D.	470.3625	F3 Cars - 3100 series
		470.4375	F1 Station - 1600
Rosemont	P.D.	470.4875	F1 Cars - 1400 series
		154.785	F2
	F.D.	154.340	Dispatch
		154.370	Alternate
Park Ridge	P.D.	470.4875	F1 Cars - 800 series
		154.785	F2

Addison	P.D.	471.2125	KKE845 - Dispatch
Wooddale	P.D.	471.2125	
Lake Zurich	L.G.	155.835	KT0570

Brandt has also cleared up the confusion in the 1980 "Police Call" listings by outlining primary freqs. for the following suburban P.D.'s.

470.4875 Park Ridge, Rosemont
471.2375 Melrose Park, Franklin Park, Northlake, Stone Park
471.2625 Berwyn, Cicero
471.2875 Elmwood Park, Harwood Heights, Norridge, River Grove, Schiller Park
Schiller Park converted the old 155.49 VHF radios for publis works usage when the UHF changeover occurred. (Editor's Note: Although primary operations occur on UHF, occasionally some secondary or misc. operations will be found on the old VHF freqs. The "ISPERN" VHF radios can be utilized for this purpose - given the "blessing" of the "ISPERN governing board". Priority features of the ISPERN radio will automatically switch the radio to 155.475 for any emergency traffic. A channel will also probably be reserved for "911" or "closest car" traffic on 155.055 - as already monitored here.)

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It's time to bring this month's column to a close. I hope that all of the midwestern members are enjoying the winter listening. (Have you checked out your antenna systems, etc. prior to winter's onset? Believe me, it's no fun to clumb a tower and change or repair an antenna in below freezing temperatures. I've had the unfortunate "pleasure" of doing same on several occasions. Watch out for that cold air and wind - they'll grab you! Real quick!!) All that's left to say is -

Happy Monitoring!!

PUBLIC SAFETY - WEST

Send Public Safety and Special Emergency frequencies, radio system details and questions for Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming to: George Hoggatt, 17473 E. 16th Drive, Aurora, CO 80011.

Send material and questions for California to: Eric Christensen, P.O. Box 272, Seal Beach, CA 91108.

Well, lo and behold, I'm the new Public Safety West editor. First, a little background about myself: age - 38, single, native of Colorado (those are almost as rare as natives of California), member of the RCMA for one year. I'm a data processing systems analyst (transportation engineering) for the Colorado Department of Highways

I've been monitoring for 23 years starting in 1957 when there were a lot fewer radios licensed (and used) than today. What I wouldn't have given for a programmable scanner then. My present equipment consists of: a Bearcat 220, a Realistic (Radio Shack) PRO-2001, Regency ACT-W10 Whammo with Digital Frequency Selector, HyGain pocket scanner (VHF high), a Regency VHF high tunable, a Drake SPR-4 Communications Receiver for shortwave, and a TRS-80 Computer that may be used to keep records and produce this column someday (about $2000 in the future).

In order for this column to work, it is going to take lots of contributions from ALL of the members. My knowledge is limited to Colorado and mostly the Denver Metro Area. A review of the Newsletter for the past year shows no contributions from New Mexico, Nevada, Wyoming, or Montana. Since we have members in all of those - WHERE ARE YOUR CONTRIBUTIONS? The rest of the western states have had some information printed but not near enough. Send in your frequency lists. Type them if possible but send them in typed or not. They will be used.

I would like to thank Lyle Galdiera and Bob Gehri for their work in editing this column for the last year.

Since I won't receive any contributions before the December deadline (it's early October as I write this) I'll build a column from my files.

Until Chuck tells me to change, the data I type will be in the following format: Column 1 - licensee; column 2 - frequency of the base transmitter; column 3 - frequency of the mobile transmitters and control stations if used; column 4 - four letters giving the service and type of transmitter(s); column 5 - remarks.

For column 4 I will use the following abbreviations:

FIRST TWO LETTERS (SERVICE)

Public Safety Radio Services:
PP Police Radio Service
PL Local Government Radio Service
PF Fire Radio Service
PH Highway Maintenance Radio Service
PO Forestry Conservation Radio Service
PS Special Emergency Radio Service

Industrial Radio Services:
IB Business Radio Service
IF Forest Products Radio Service
IM Motion Picture Radio Service
IP Petroleum Radio Service
IS Special Industrial Radio Service
IT Telephone Maintenance Radio Service
IW Power Radio Service
IX Manufacturers Radio Service
IY Relay Press Radio Service
EX Experimental

Land Transportation Radio Services:
LU Urban Passenger

SECOND TWO LETTERS (TRANSMITTER TYPE)

BA base station only
MO mobile units only
BM base and mobile
RP repeater or mobile relay
OF operational fixed (usually microwave)
FX fixed
CO control station
PO radiolocation mobile (radar)
ZO zone police (CW backup of teletype)
IZ interzone police (same)

LICENSEE	BASE	MOBILE	TYPE	REMARKS
Douglas County	155.115	154.965	PL RP	Ch. 1 Dispatch
	155.115	155.115	PL BM	Ch. 2 Car to car
Used by the Sheriff, Castle Rock PD and FD, Perry Park FD, Larkspur FPD, Care Ambulance, Parker FPD, Franktown FPD, all county units				
Parker Fire Prot. Dist.	154.145	155.445	PF RP	Dispatch
Service Area: Northeast Douglas County, a small portion of South Central Arapahoe County				
Jefferson County	155.250	155.850	PP RP	Sheriff Ch. 1 Dispatch
	155.370	155.370	PP BM	Sheriff Ch. 2
	155.430	155.430	PP BM	Sheriff Ch. 3
	460.025	465.025	PP RP	Sheriff Command
	45.200	45.200	PL BM	Sheriff Jeep Patrol
	156.000	158.805	PL RP	High Band Fire, Local Govt.
	45.080	45.080	PL BM	Low Band Fire, Local Govt.

Police Departments dispatched from the Jefferson County Communications Center:
- Lakeside
- Mountain View
- Edgewater
- Morrison
- Denver Mountain Parks Police (also on Denver PD, State Patrol Div. 6)

Fire Departments dispatched by the Jefferson County Sheriff:
(Those having their own frequency or on other frequencies have those in parenthesis)

- Coal Creek Canyon Fire Protection District (46.06, 46.44, Boulder County)
- Evergreen Fire Protection District
- Evergreen Ambulance
- Indian Hills Fire Protection District (45.32)
- Indian Hills Ambulance
- Elk Creek Fire Protection District and Rescue (46.16)
- Inter-canyon Fire Protection District and Ambulance
- Lookout Mountain Fire Protection District
- Genesse Fire
- Mt. Vernon Fire Protection District
- Idledale Fire Protection District and Ambulance
- Pleasant View Fire Protection District and Ambulance
- North Fork Fire Protection District

Castlewood FPD 154.235 153.905 PF RP Dispatch
Service area: West of Cherry Cr., East of Littleton FPD, South of Cherry Hills FPD, includes the Arapahoe County Airport. Station 1 - 6620 S. Dayton, Station 3 - 7281 E. Dry Creek Rd. (also headquarters)

COLORADO STATE PATROL - TRANSMITTERS CONTROLLED FROM THE DENVER COMMUNICATIONS CENTER - 4201 E. Arkansas Ave.

TRANSMITTER LOCATION	CALL	FREQ	TYPE	USE
4201 E. Arkansas Ave, Denver	KAA938	154.665	PP BA	CSP Dist. 1
	KAA938	154.695	PP BA	CSP Dist. 6
	KAA938	154.905	PP BA	CSP channel 3
	KBI911	47.020	PH BA	Highways
	KA0679	45.240	PL BA	Forests
	KAP30	1911.00	PL OF	Microwave
	KAP30	2145.00	PL OF	Microwave
	KAP30	2195.00	PL OF	Microwave
	KAP30	6775.00	PL OF	Microwave
	KAP30	6805.00	PL OF	Microwave
Squaw Mountain	KAA938	154.665	PP BA	CSP Dist. 1
	KAA938	154.695	PP BA	CSP Dist. 6
	KAA938	154.905	PP BA	CSP channel 3
	WBP550	155.505	PP CO	CSP channel 4 input
	output is on 154.695 in South Park			
	KBI911	47.020	PH BA	Highways
	KRX565	45.240	PL BA	Forests
	KAP31	1905.00	PL OF	Microwave
	KAP31	6615.00	PL OF	Microwave
Mines Mountain nr. Berthoud Pass	KAP594	154.665	PP BA	CSP Dist. 1
	KAP594	154.695	PP BA	CSP Dist. 6
	KAP594	154.905	PP BA	CSP channel 3
	KBI909	47.020	PH BA	Highways
	KBB98	1945.00	PL OF	Microwave
	KBB98	1985.00	PL OF	Microwave
Near Mead	KF0695	154.665	PP BA	CSP Dist. 1
	KF0695	154.905	PP BA	CSP channel 3
	KGU493	47.020	PH BA	Highways
	WBX328	1865.00	PL OF	Microwave
	WBX328	1925.00	PL OF	Microwave
Broomfield CSP Office	KAD443	154.665	PP BA	CSP Dist. 1
Wire line control and local control	KAD443	154.905	PP BA	CSP channel 3

The microwave is used to control the remote transmitter locations and are also part of a State telephone system used to connect both Colorado State Patrol (CSP) offices and Highway offices with each other without long distance charges.

STATE OF COLORADO, DEPARTMENT OF NATURAL RESOURCES
FORESTRY CONSERVATION RADIO SYSTEM

REGION	BASE	MOBILE	TYPE
Northwest	151.145	151.445	PO RP

TRANSMITTER LOCATIONS (CONTROL LOCATIONS)

Cedar Mtn. nr. Craig
Walton Mtn. nr. Steamboat Spgs.
Parshall Divide nr. Hot Sulpher Spgs.
Wilson Creek nr. Meeker
Grand Mesa (Grand Junction)

Fairmont Fire Prot. Dist.	154.385	153.890	PF	RP	Dispatch by Jefferson County
Bancroft Fire Prot. Dist.	154.220	154.370	PF	RP	Dispatch Service area: South Lakewood, South East Jefferson County, Morrison
Wheat Ridge Fire Prot. Dist.	46.120	46.120	PF	BM	Dispatch Service area: City of Wheatridge and vicinity
Edgewater, Town of	154.445	154.445	PF	BM	Dispatch (fire)
Golden, City of	155.910	155.910	PP	BM	Police
	155.835	155.835	PL	BM	Fire and other city
Denver, City & County of	154.310	153.770	PF	RP	Fire Ch. 1 Dispatch
	154.070	154.070	PF	BM	Fire Ch. 2 Misc. & Paging
	45.160	45.160	PL	BM	Health & Hospitals
	453.175	none	PL	BA	Denver General Hosp. Paging
	155.340	155.340	PS	BM	Denver Paramedic Dispatch
	45.200	45.200	PL	BM	Civil Defense
	155.085	153.740	PL	RP	Airport Operations (simulcasts 453.500 Airport police)
	155.940	158.940	PL	RP	Dept. of Public Works
	151.115	159.000	PH	RP	Street & Highway Dept.
	48.500	48.500	IW	BM	Board of Water Commisioners
	453.825	458.825	PL	RP	Sheriff replaces 158.91/155.55
Englewood, City of	155.730	156.150	PP	RP	Ch. 1 Police Dispatch
	154.160	154.415	PF	RP	Ch. 2 Fire Dispatch
	154.875	155.970	PP	RP	Ch. 3 Police misc.
	153.800	?	PL	RP	other city units

Fire Stations on Englewood Fire:

NO	NAME	DEPARTMENT	LOCATION
1	Jefferson	Englewood	3615 S. Elati (PD & FD Headquarters)
2	Quincy	Englewood	Quincy and Pearl
3	Bellview	Englewood	Bellview and Fox
4	Tejon	Englewood	Tejon and Dartmouth
	Federal	Englewood	Federal north of Quincy in Sheridan
1	University	Cherry Hills FPD	University and Cherryville Rd.

Cherry Hills Fire Protection District Service Area: all of Cherry Hills Village, Greenwood Village west of Holly, 2 small unincorporated areas between Cherry Hills Village and Englewood west of Clarkson. Englewood and Cherry Hills FPD have a mutual aid agreement that makes them almost a single fire department.

Also dispatched is the College View Fire Protection District (Station at Bates and Decatur), however this district has had all of its' service area absorbed by Denver and Englewood. It still exists as a tax district and the residents pay taxes for two fire departments. Efforts to disband the tax district and have Denver and Englewood assume the liabilities of the fire district have failed.

Clear Creek County	155.025	155.745	PL	RP	Used by the Sheriff, Idaho Springs PD and FD, Georgetown PD and FD, Empire PD and FD, FBI, County Ambulances (501 and 502), other county units. The Sheriff's units and the PD units also have State Patrol Channel 3 (154.905).

The Detectives of the Police Departments in the Denver Metro Area frequently work in teams over the entire area on large scale investigations. In addition to using the frequencies of the various departments, they are found on the following

Colorado Bureau of Inves.	155.460	155.790	PP	RP
National Mutual Aid Freq.	155.475	155.475	PP	BM
Denver Police Ch. 6	453.700	458.700	PP	RP
Denver Detectives	453.350	458.350	PP	RP

Cunningham FPD	46.500	46.500	PF	BM	Dispatch

Service Area: Unincorporated area along Parker Rd. between Aurora and Denver, plus East of Cherry Cr. south of Aurora. Station 1 - 2201 S. Parker Rd. Station 2 - 5600 S. Tower Rd.

Also dispatched - Skyline Fire Protection District. Service area - unincorporated area surrounded by Denver near I25 and Yale. Station - 6040 E. Yale. Headquarters - 2201 S. Albion

Southwest 151.190 151.475 PO RP

Missionary Ridge nr. Durango
La Monte Pk. nr. Mancos
North Mtn. nr. Nucla
Storm King Mtn. (Montrose)
Pool Table Mtn. nr. Del Norte
La Veta Pass nr. Walsenburg

Southeast 151.175 151.460 PO RP

Cheyenne Mtn. nr. Colorado Spgs. (Colorado Spgs., Pueblo)
Toonerville (Las Animas, Springfield)
Boyero nr. Hugo (Bonny St. Recreation Area)
La Veta Pass (Walsenburg)
Bald Mtn. (Buena Vista)
Monarch Pass (Salida)
Twin Mtn. nr. Canon City

Northeast 151.190 151.475 PO RP

Buckhorn Mtn. (Ft. Collins)
Reiradon Hill (Sterling)
Wray
Squaw Mtn. (Denver Game Fish & Parks HQ, Chatfield Rec. Area, Cherry Cr. Rec. Area)
Mead (Denver Game, Fish & Parks HQ)
Point-of-Rocks nr. Barnsville

The mobile units are equipped to use all of the above plus the statewide simplex frequency (car-to-car) 151.400.

The repeaters are tone squelched- mobile tone #1 - 141.3 cps
mobile tone #2 - 146.2 cps
mobile tone #3 - 151.4 cps
mobile tone #4 - 156.7 cps

COLORADO STATE PATROL RADIO CODES

CODE	MEANING	CODE	MEANING
10-0	Caution	10-29	Check for wanted
10-4	OK	10-33	Emergency
10-5	Relay	10-41	Beginning tour of duty
10-7	Out of service	10-42	Ending tour of duty
10-8	In service	10-50	Accident (PI, PD,unk)
10-9	Repeat	10-55	Intoxicated driver
10-13	Weather/road report	10-64	Message for local delivery
10-20	Location	10-66	Cancellation
10-21	Call _____ by phone	10-78	Need assistance
10-23	Arrived at scene	10-89	Bomb threat
10-24	Assignment completed	10-95	Prisoner/subject in custody
10-27	Drivers license info.	10-96	Mental subject
10-28	Vehicle registration	10-99	Wanted/stolen indicated

COLORADO STATE PATROL WEATHER CODES

Code 1	Weather clear	Code 13	Road(s) closed
Code 2	Overcast	Code 14	Road wet
Code 3	Windy	Code 15	Road dry
Code 4	Fog	Code 16	Road icy
Code 5	Dust blowing	Code 17	Road icy in spots
Code 6	Visibility poor	Code 18	Road snowpacked
Code 7	Raining	Code 19	Road snowpacked in spots
Code 8	Hail	Code 20	Road sanded
Code 9	Light snow	Code 21	Road slushy
Code 10	Snowing hard	Code 22	Drifting snow
Code 11	Ground blizzard	Code 23	Chain law in effect
Code 12	Snowslide		

DENVER AREA MED CHANNELS

CHAN ID	BASE	MOBILE	SUB-CHAN*	REMARKS
Med-1	463.000	468.000	none	Usually repeater
Med-2	463.025	468.025	458.025	" "
Med-3	463.050	468.050	none	" "
Med-4	463.075	468.075	458.075	" "
Med-5	463.100	468.100	none	" "
Med-6	463.125	468.125	458.125	" "
Med-7	463.150	468.150	none	" "
Med-8	463.175	468.175	458.175	" "
Med-9	462.950	467.950	none	Repeater
Med-10	462.975	467.975	none	Repeater

Med-9 is usually used by hospitals and ambulances operating in Weld and Larimer counties. It is used in the Denver area if Med-10 is busy.

Med-10 is used by all Denver area ambulances and hospitals. St. Anthony Hospital acts as net control, assigning the Med channel to be used to relay data to the hospital. If the receiving hospital doesn't have radio, St. Anthony will make contact with a phone patch.

* The sub-channels are used by low power portable units which transmit to a repeater in the vehicle which acts as a mobile relay on the mobile frequency.

From ERIC (CA-LA-045): (P.O. Box 272, Seal Beach, CA 90740)

WELCOME TO RCMA PUBLIC SAFETY WEST-CALIFORNIA FOR JANUARY 1981!!!!! Can you believe it is 1981 already?! By the way, I'm writing this in early November, 1980. By the time you read this, the holiday season will be upon us. Therefore, H A P P Y H O L I D A Y S ! !

Speaking of New Year's Day, let's listen to the Rose Parade/Rose Bowl!

FREQUENCY	MODE	CHANNEL	USAGE/PURPOSE
506.4625 MHz	R	Pasadena PD Fr. 1	Normal police operations
506.6875	R	Pasadena PD Fr. 2	Rose Parade/Bowl command
39.48	BM	LA Sheriff "Charlie"	LASO Prisoner vans/units
39.72	BM	LA Sheriff "Edward"	LASO Prisoner vans/units
39.32	BM	LA Sheriff "William"	LASO Prisoner vans/units
470.8625	R	LA Sheriff F-6	LASO Foot patrol
470.9125	R	LA Sheriff F-8	LASO Foot patrol
42.34	BM	Calif Hwy Patrol "Blue"	CHP Traffic control/patrol
154.515	BM	Rose Parade Command channel	
154.92	BM	CLEMARS	Mutual Aid-command
155.955	BM	Pasadena local government	
158.82	BM	Pasadena local government	
458.425	BM	Pasadena local government	
147.27	R	Amateur Radio-parade command channel	
145.30	R	Amateur Radio-parade command channel	
46.10	B	Pasadena Fire Dept. Dispatch "VERDUGO"	
153.89	BM	Pasadena Fire Dept. Primary (30 series)	
150.92	BM	Automobile Club of Southern California (AA-ACSC)	
150.95	BM	ACSC-AAA	
450.750	R	KMPC Radio Station-2 way radio system	
450.850	R	KFWB Radio Station-2 way radio system	
161.76	BM	KNBC TV 2 way radio system	
173.375	BM	Pasadena Star News (newspaper 2 way radio system)	
151.625	BM	Unknown users-possibly tow trucks or security	
151.655	BM	Same as 151.625	
151.775	BM	Same as 151.625	
151.805	BM	Ranger Security Company, Pasadena	
46.00	BM	MEDEVAC Ambulance Company, Pasadena	
47.42	BM	American Red Cross	
462.675	BM	Pasadena City College Security (GMRS)	

With all of these frequencies to listen to, your programmable scanners will be plenty busy! Pasadena P.D. Freq. 2 is a MUST to listen to as this is just about THE command channel. The LASO sets up a mobile communications center adjacent to Pasaden City Hall, where they operate their communications. You might also want to check all of LASO's UHF frequencies (see listing in RCMA December 1980 issue, pg 24.) The City of Pasadena Police Dept. provide routine police services within the city on Freq. 1 (506.4625) while parade/bowl game command on Freq. 2 (506.6875). The LASO provides police services along the parade route, at the Rose Bowl and traffic control at numerous intersections. Many other local police departments, such as San Marino PD (156.33), Sierra Madre PD (158.73), South Pasadena PD (470.9875), Monrovia PD (158.73), Arcadia PD (507.0625), Glendale (159.09), and others have numerous police officers, reserve officers, cadets and police explorers helping out throughout the area. A lot of traffic information may be heard on the California Highway Patrol's frequencies: Blue 42.34 (which is used along the parade area), Brown 42.50 which is the main dispatch channel for the Glendale area, Orange 42.88 which is the main dispatch channel for the Baldwin Park area which serves the far eastern section of Pasadena, and the Black channel 42.46 which is the dispatch channel for Central LA. Helicopters/Blimp:122.75 123.025, and 132.0 (Blimp only) Aircraft use AM!
GOOD LUCK-Happy Monitorir

From JACK (CA-LA-299):

POLICE DEPARTMENT-City of Pasadena
Unit Numbering System

Radio Frequencies KWX738 Dispatcher identifies as follows: "KWX738 'The Pasadena Police'"

Freq. 1	506.4625 MHz.	R	Dispatch & Car to Car
Freq. 2	506.6875 MHz.	R	Records Inquiry & Tactical
Freq. 3	506.4625 MHz.	S	No repeater
Freq. 4	506.6875 MHz.	S	No repeater

NOTE: Repeater inputs are 3.00 MHz. higher than repeater outputs, ie: 509.4625 MHz. (Freq. 1) & 509.6875 MHz. (Freq. 2).

Unit Numbering System

Patrol units consist of a number (1, 2, or 3) depending upon watch assigned to:

Watch 1:	Early Mornings	2330 hrs to 0800 hrs
Watch 2:	Day Shift	0730 hrs to 1600 hrs
Watch 3:	Swing Shift	1530 hrs to 2400 hrs

This number is then followed by a letter designating the type of unit

"A"	2 Man Patrol	"S"	Special Enforcement Team
"L"	1 Man Patrol	"J"	Juvenile Unit
"M"	Traffic	"V"	Vice and Narcotics
"R"	Reserve	"Y"	Intelligence
"T"	Uniformed agent	"Q"	Special
"U"	Uniformed report unit	"H"	Command Services/Communications
"K"	Detective	"SR"	Security Ranger (non sworn park pat)

Patrol units also have two digits which follow their respective letter (A, L, M, R, T, or U). These two digits indicate area of service

"10"	Watch or section commander
"20, 30, 40, 50,... 90" and/or Unit	Sergeants Commanders
PD 1 thru PD 3	Helicopter in the air
PD 5 thru PD 7	Helicopter personnel in cars
PD 4	Helicopter or crew at heliport
PD 10	Helicopter Unit Commander
Staff 1	Police Chief
Staff 2 thru 5	Division Commanders

Patrol Units: First number is patrol area, the second number indicates which car. IE: 11 Area 1, Car 1
12 Area 1, Car 2

A typical patrol unit number would be: "3L21" This car would be assigned to Watch 3, it would be a one man patrol unit, and it would be the first car in area 2.

Detective Units: The last two digits indicate the type of detective
"20" Burglary, "White crimes" against persons
"30" Auto Theft and forgery
"40" Crimes against persons, including Homicide, Robbery & Assault
"10" Commander of Detective Bureau

****

INFO: Pasadena Fire Department operates within the "Verdugo" fire net, which is a mutual fire dispatch system shared by Burbank, Glendale and Pasadena Fire Departments.

Dispatching: 46.10 MHz. (Base only) "VERDUGO" WRB451

"RED"	153.89 MHz.	Primary	"BLUE"	154.2035 MHz.	Paramedics
"GREEN"	153.77 MHz.	Tactical	"YELLOW"	154.34 MHz.	LA CO FD
"BLACK"	153.83 MHz.	Low-power	"GREEN"	154.28 MHz.	Mutual Aid

Burbank F.D. "10" series; Glendale F.D. "20" series; Pasadena F.D. "30"ser

County of Orange-Net Six Fire Departments-Station Numbering/Operations

From DWAYNE (CA-OR-):

Since 1974, the Net Six Communications Center has been located in the new Joint Power Training Facility at 18301 Gothard Street in the City of Huntington Beach. With the implementation of this communications system, the ultimate in dispatching efficiency and resource management has been attained. During 1975, the computer aided communications system was updated.

The computer aided dispatch system basically consists of a dispatch console with two positions: the Incident Receiving and Incident Dispatching. The Incident Receiving position has a keyboard, similar to a typewriter which will enter information on a Cathode Ray Tube (CRT), which is a screen similar to a television monitor.

Using the keyboard, the Incident Receiver enters the address, type of incident (fire, medical aid, washdown, etc.), department to respond (police, fire, combination), callback phone number, and a brief description of the incident. This information is typed in by the Incident Receiver as the informant is giving it to him. The Incident Receiverthen depresses a transmit button which will send the impulse to the computer for assignment.

Within a few milliseconds from the time the Incident Receiver depressed the transmit button, the information returns to the Incident Dispatcher's screen with additions from the computer of the time, incident number, response district, fire box and unit assignment. Reading the information from the screen he makes a dispatch simultaneously over the Fire Department radio and the intercom paging system into the fire stations. Following his verbal dispatch, he transmits the information appearing on the screen to the teleprinters located in each fire station and inside each fire department emergency vehicle. When the Incident Dispatcher depresses his transmit button, the information relating to the incident will teleprint on a piece of paper inside each fire vehicle assigned to respond and to the teleprinter in the fire station.

In each fire vehicle is an automatic mobile status system called a "MODAT". The Modat is connected to the vehicle's two-way radio and interfaced with the computer and a status screen in front of the Incident Dispatcher. The modat is equipped with push buttons which allows the status of the fire company to be displayed on the Incident Dispatcher's screen without making verbal communication. By looking at the screen, the dispatcher can see all the vehicles responding to incidents and the incident identification number of each response.

In addition to the status buttons, the Modat has four "canned" messages that can be actuated to appear on the status screen. In conjunction with the messages, the number of the unit sending the message will be depicted to allow the dispatcher to identify the originator of the message and further reduce the amount of verbal communication.

The Net Six communications system is designed to grow as the needs for public safety services grow. Additional software modules and more sophistication can be added to the present system as needed.

From PETE (CA-OR-013), DWAYNE (CA-OR-) & ERIC (CA-LA-045):

County of Orange-Net Six Fire Departments-Apparatus

HUNTINGTON BEACH "Station 82" 46.28 MHz. KMD661

Bushard	8204		
Gothard	8209, 8201	Battalion Chiefs	
Heil	8203	8255, 8256, 8257	
Lake	8208, 8222* MD63		
Magnolia	8210	In Reserve	
Murdy	8207, 8221* MD61	8205, 8206, S127	
Warner	8211		

NOTE: The Joint Powers Training Center is located at the same location as the Gothard Station.

FOUNTAIN VALLEY "Station 80" 46.28 MHz. KDZ419

Station # 1: 8011, 8025, MD62	Battalion Chiefs	In Reserve
Station # 2: 8012	8053, 8054, 8055	8013

NOTE: Station # 1 is located on Bushard St.
Station # 2 is located on Newhope St.

WESTMINSTER "Station 87" 46.28 MHz. KAU475

Station # 1: 8704, 8726* MD64	Battalion Chiefs	In Reserve
Station # 2: 8701, 8702	8754, 8755, 8756	(none shown)
Station # 3: 8703		

NOTE: Station # 1 is located on Goldenwest St.
Station # 2 is located on Moran St.
Station # 3 is a new station opened on 02/02/80 located on Hefley St.

SEAL BEACH "Station 81" 46.28 MHz. KDY396

Station # 1: 8105	Battalion Chiefs	In Reserve
Station # 3: 8104, 8121, MD65	8100, 8152	8102-Volunteer
		8103-Volunteer
		8101
		S158

NOTE: Station # 1 is located on Beverly Manor Dr.
Station # 2 is not in use.
Station # 3 is located on 8th St.

NOTE: On any equipment number showing a (*), this piece of apparatus is a ladder truck.

NOTE: All radio communications within Net Six Fire Departments operate on a mutual radio system:

Freq. 1:	46.28 MHz.	Dispatch
Freq. 2:	46.06 MHz.	Countywide-Mutual Aid**
Freq. 3:	46.48 MHz.	Countywide-Interagency Coordination**
Freq. 4:	46.42 MHz.	Countywide-Cross Net Coordination**
Freq. 5:	46.38 MHz.	Reserved for Orange County Fire Dept.

NOTE: (**) indicates a County operated/coordinated mutually shared radio frequency. Freq. 1 (Dispatch) will vary between Fire Nets.

From MIKE (ID-001)

"The CHP frequency use seems to have your readers confused. As a member of the CHP and of your club (I live in California now) I will try to straighten a few problems. Lloyd's listing printed in the November 1980 newsletter is correct with the following exceptions:
#47 Woodland now operating on the Black channel.
#112 So. Sacramento also on the Black.

#48 Modesto now operating on the Yellow channel.
#103 Tracy also on the Yellow.

Finally, Bridgeport is in the Valley Division, not Inland Division.

Zones are no longer called that. Divisions took it's place.

Reference the 15 Area offices with different frequencies shown in Nathan's listing (Code 20 Calif. Radio Directory) that Rene (CA-SC-18) sent in, let me say that with the above corrections, it is correct. I'm referring to the letter in Nov's. newsletter. (Lloyd's is correct) The following Area offices do not exist; #10 Round Valley Indian Reservation; #11 Fort Bragg;#33 (definitely not) Stewart's Point; #53 McArthur; #100 Ridgecrest; #107 Delano; #110 Maricopa. However, Fort Bragg has a resident post known as Ukiah Coastal and Ridgecrest is a resident post. There are 32 resident post's statewide. They do not have Area Office numbers (station numbers) as the regular offices do. When it comes to dispatching on the radio, the resident post's have the same number as the area they are responsible to. I believe Nathan used some fictitious stations to detect the misuse of his directory. (I have not seen Code 20).

42.60 is licensed to the CHP as is 45.02, but I don't yet know what these frequencies are used for.

In closing, please let me say thanks to Lloyd for his efforts."

From MIKE (IDAHO-001):

CALIFORNIA HIGHWAY PATROL-Resident Posts

Here are the resident posts listed in alphabetical order.

Resident Post	Area	Resident Post	Area
Big Sur	Monterey	Lower Lake	Lakeport
Borrego Springs	El Cajon	Loyalton	Truckee
Burney	Redding	Mammouth	Bridgeport
Challenge	Yuba-Sutter	Mountain Pass	Barstow
Chester	Susanville	Needles	Barstow
Coleville	Bridgeport	Oakhurst	Mariposa
Death Valley	Bishop	Portola	QUIncy
Dorris	Yreka	Ridgecrest	Mojave
Downieville	Grass Valley	Shaver Lake	Fresno
Ebbetts Pass	San Andreas	Taft	Bakersfield
Happy Camp	Yreka	Tulelake	Yreka
Jacumba	El Cajon	Ukiah Coastal	Ukiah

Julian	**El Cajon**	**Vidal**	**Blythe**
Kernville	**Bakersfield**	**Walnut Grove**	**So. Sac.**
Laytonville	**Garberville**	**Willitts**	**Ukiah**
Lee Vining/June Lake	**Bridgeport**	**Willow Creek**	**Trinity River**
Lone Pine	**Bishop**	**Winterhaven**	**El Centro**

From BRYAN (CA-OR-097):

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT RADIO UNITS

Freq. "Y" 44.84 MHz.
Freq. "X" 44.96 MHz.
Freq. "A" 159.27 MHz.

Mobile Unit Call Letters
KA 6331
(Used on ALL frequencies)

MAIN STATION CALL LETTERS-Freq. Y

KMG 939	Alcazar
KMF 939	Flint Peak
KRJ 674	Los Pinetos
KMG 737	San Pedro Hill
KVR 912	Johnstone Peak

MAIN STATION CALL LETTERS-Freq. X

KVR 911	Alcazar
KVR 910	Flint Peak
KRJ 674	Los Pinetos
KMG 737	San Pedro Hill
KVR 912	Johnstone Peak

Additional Site Call Letters-Freq. Y

KMF 940	Puddingstone Dam
KMF 941	Santa Anita Dam
KMF 942	Devil's Gate Dam
KMF 943	Big Dalton Dam
KMF 944	Sawpit Dam
KMG 738	Morris Dam
KMG 739	Cogswell Dam
KMG 740	Big Tujunga Dam
KMG 741	Eaton Yard
KMG 742	Longden Yard
KMG 743	Imperial Yard/Rio Hondo
KMG 744	Pacoima Dam
KMG 745	San Dimas Dam
KMG 746	San Gabriel Dam
KMG 747	Santa Clarita Yard
KMG 748	Camp Hi Hill
KMG 860	Hansen Yard
KMG 861	83rd St. Yard
KZC 562	Pickens Yard

Additional Site Call Letters-Freq. X

KMG 742 "X"	Longden Yard
KMG 743 "X"	Imperial Yard/ Rio Hondo
KMG 747 "X"	Santa Clara Yard
KMG 860 "X"	Hansen Yard
KMG 861 "X"	83rd St. Yard
KZC 562	Pickens Yard

Radio Station Sites-Freq. A

KMB 285	Alcazar
KMB 285	Flint Peak
KRJ 647	Los Pinetos
KMG 737	San Pedro Hill
KVR 912	Johnstone Peak
KME 430	Eaton Yard (Used by C & E Division units)

Handie Talkie Units 159.405 MHz.

501, 502, 503, 504, 505

Handie Talkie Units 159.27 MHz.

506, 507, 508, 509

Unit Call Letter Designators

"A" series Administrative Services
"E" " Communications and Electrical
"C" " Contract Administration
"S" " Survey
"H" " Hydraulic
"D" " Design
"M" " Program Management
"P" " Property Management
"W" " Water Conservation

Operations and Maintenance Units

100X thru 136X Hansen Yard units operations on Freq. X
100Y thru 135Y " " " " " " Y
150X thru 178X Pickens Yard " " " " X
150Y thru 178Y " " " " " " Y
200X thru 235X Longden " " " " " " X

PUBLIC SAFETY - WEST, CALIFORNIA CONTINUED

200Y thru 242Y	"	"	"	"	"	" Y
250X	--	Eaton	Yard	"	"	" " X
250Y thru 266Y	"	"	"	"	"	" " Y
300X thru 345X	Imperial	Yard	"	"	"	" X
300Y thru 343Y	"	"	"	"	"	" Y
350X thru 384X	83rd Street	Yard	units	"	"	" X
350Y thru 380Y	"	"	"	"	"	" Y

MARKETPLACE

Members may advertise, free of charge, items wanted, items for sale and items for trade that are associated with the hobby of monitor radio listening above 30 MHz. No dealer ads accepted. Send to: Gary Darcy, Box 1329, Palmdale, CA 93550. RCMA assumes no responsibility for the outcome of any transactions between members resulting from ads in this column.

FOR SALE: Regency K-100 Programmable Scanner. In original box with warranty card. Works perfectly. Sell for $175.00 or trade for M-100 in new condition, under warranty. Certified Check only and unit will be shipped UPS Insured. Contact Ed Linskey, PO Box 85, Burlingame, CA 94010 or call 415-344-2141 evenings. (CA-SM-001).

FOR SALE: Sears VHF-UHF Programmable Scanner. Reconditioned. 16 channels. Cards included. Will ship. $150.00. Contact Rick Illes, 507 Electric Ave., Seal Beach, CA 90740 or call 598-5913. (CA-LA-283)
***EDITOR'S COMMENT: Rick did not indicate any area code. According to the phone company, Seal Beach is in the 213 area code.

FOR SALE: Bearcat BC-300. Brand new, unused. $365.00. Certified Check or money order only. Contact J. Whittle, PO Box 1132, Dublin, GA 31021 (GA-021)

FOR SALE: Regency Digital Flight Scan. 16 channels w/2 priority channels. Covers 108-136 mhz. Frequency synthesized. Blank warranty card included. Has been in the box most of the time. Very good condition. $195.00 Certified Check or money order. No collect calls. Contact John Land, RR 7 Box 210, Greenfield, IN 46140 or call 317-894-3289. (IN-039)

FOR SALE: Plectron 8-channel VHF Hi-Lo band scanner w/Priority scan. Uses Regency type crystals. Radio is in excellent condition. $145.00. Money order please!! Contact Bob Andrycha, 119 Burgundy Terrace, N. Tanawanda, NY 14120 or call 716-688-8846. (NY-003)

WANTED: Information on any old or older Realistic tuneables or scanners, etc. or surplus for sale. Need to know band coverage, price, and condition. Contact Billy W. Brightwell, Rt. 2 Box 218B, Hull, GA 30646. (GA-019)

GARY M. DARCY
P. O. BOX 1329
PALMDALE, CA. 9355(

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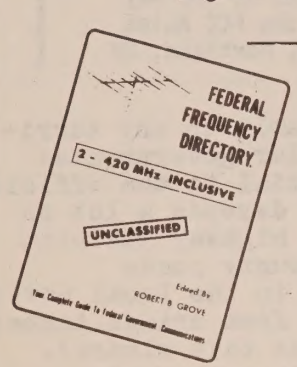

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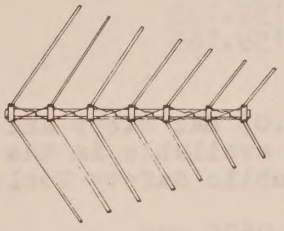
A 60-MINUTE CASSETTE IDENTIFIES THOSE STRANGE SOUNDS: TELEMETRY, MULTI—PLEX JAMMING, SPY TRANSMISSIONS, SWEEPERS, TELETYPE, MANY MORE. EXPLAINS IN EASY—TO—LISTEN TERMS: HOW TO BUY A RECEIVER, PLANNING THE PROPER ANTENNA, COPING WITH INTERFERENCE, WHEN AND HOW TO LISTEN, CHOOSING ACCESSORIES.



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FINALLY, A DIRECTIONAL ANTENNA MADE ESPECIALLY FOR SCANNERS. PICK UP THOSE WEAK, DISTANT STATIONS WITH EASE. OPTIMIZED FOR 108 - 174 AND 406 - 512 MHz AIRCRAFT, LAND MOBILE, AND AMATEUR SERVICES. ALSO RECEIVES 30 - 50 MHz (non-directional). MATCHING TRANSFORMER AND MOUNTING HARDWARE INCLUDED.

SEARCHING FOR THE SOUNDS OF TOMORROW

GROVE ENTERPRISES

ROUTE 1 BOX 156 F BRASSTOWN, NC 28902

FCC TOPICS

George DuBois, Editor

Send FCC news and information of interest that relates to two-way communications above 30 MHz and questions regarding the FCC Rules and Regulations to: George DuBois, 10048 NE Campaign, Portland, OR 97220.

The Highway Maintenance Radio Service is available to any territory, possession, state, county, city, town or similar governmental entity for the transmission of communications essential to the official highway activities of the licensee. What this means depends a lot on where you live. For most of us this means the state highway division fixing guardrails or painting white lines, or the county roads department paving potholes. If they aren't licensed in the Local Gov't Radio Service instead, it may also include anything from bridge inspectors to toll booth guards to snowplows (remember that this winter). Other likely candidates might include your local city engineering department, your state or local parks, expressway police, maybe even traffic signal repairmen.

These are the channels available for assignment:

33.02#	37.94#	45.76	151.025	151.100	156.075*
33.06#	37.96	45.80	151.040	151.115	156.105
33.08#	37.98#	45.84	151.055	151.130	156.120
37.90#	45.68	150.995	151.070	156.045*	156.135
37.92	45.72	150.010	151.085	156.060*	159.180
					159.195

Shared with other services * for mobile use

Also available are the channels from 47.02 through 47.40 mHz in .02 mHz steps, which are assigned to State governments only.

This group of frequencies are for licensees other than states (cities, counties, etc.):

156.165	158.985*	159.075*
156.180	159.000*	159.105
156.195	159.015*	159.120
156.225	159.045*	159.135
156.240	159.060*	159.165

* for mobile use

UHF channels go from 453.05 through 453.95 in .05 mHz steps and are shared with other services, as are the channels available in the 851 to 866 mHz band. T-band channels are from the Public Safety Pool, which looks like this:

L.A. - 470.3125-471.1375, 506.3125-507.2625 mHz
N.Y.C. - 470.3125-471.4125, 476.3125-477.4125
Wash.D.C. - 488.3125, 494.3125-495.4125
Boston - 470.3125-471.1375, 482.3125-483.1375
Chicago - 470.3125-471.1375, also 476.3125-478.9875

Philadelphia and San Francisco, send me a self-addressed postcard for the channels in your cities. In the other cities that have T-band channels available, assignments are taken from a pool available to all services, consisting of the entire 3 mHz band(s).

A few more points: first of all, the four channels, 156.045, 156.060, 156.165 and 156.180, aren't available within 100 miles of New Orleans, La. The reason for this is that they are in what is the Marine Band outside of North America, Marine channels 1-5 and 61-65. (See the table in October's Marine column.) Additional channels were needed for Mississippi river navigation, so what better place to take them from, since they would be part of the International Marine Band. Another point is the fact that the 47 mHz state-use channels are

RCMA NEWSLETTER FREQ. LIST

SUBMITTED BY: _____ DATE LAST HEARD _____

(NAME) (RCMA NO.) (MONTH YEAR)

	SVC.	CITY COUNTY	ST.	USER	USAGE	CHAN.	CALL	CONF.	FREQ.
1									.
2									.
3									.
4									.
5									.
6									.
7									.
8									.
9									.
10									.

11							.
12							.
13							.
14							.
15							.
16							.
17							.
18							.
19							.
20							.

INSTRUCTIONS: Please use this form to submit frequency infomation for Newletter publication. Suggest photocopying for additional submittals or additional copies available upon receipt of S.A.S.E.

EXAMPLE

PD	Pasadena, L.A.	CA	Dispatcher	F1	KWX 738	R	506.4625

allocated according to a geographical assignment plan. Very simply, two channels are available in an entire state and two more are available, one in roughly each half of the state. The exceptions are New York, with four channels available statewide, 47.22, 47.32, 47.34 and 47.40, and California, with three statewide channels, 47.02, 47.08 and 47.10, besides the other two, 47.20 north of 37° latitude and 47.16 south.

Illinois has 47.30 and 47.38 available statewide, with 47.14 available north of 40° latitude and 47.34 south. Pennsylvania has 47.30 and 47.38 statewide with 47.14 available west of 77° longitude and 47.28 east. If you don't know which channels are available in your state, just mail me a self-addressed postcard and I'll fill you in.

Skip? What skip?

In the August column I outlined a proposal which would reallocate the ten 35 mHz mobile telephone channels for one-way paging on a shared basis with existing stations. Also under consideration was whether to allocate these channels for paging under a geographical assignment plan, as is done now with the mobile telephone stations, or to allocate all ten in all areas. Relative to this, Technical Memorandum Number 12 was released, "Investigation of the Effects of Skip Interference at 35 Mhz in the Domestic Public Land Mobile Services", prepared by the Propagation Analysis Branch. The study concluded that skip signal levels can and do exceed the standards for acceptable co-channel interference, namely 21db above 1 microvolt per meter. (These standards dictate that two paging transmitters on the same channel, running 500 watts, would typically have to be at least about 70 miles apart.) Beyond this, the stu y made the following observations:

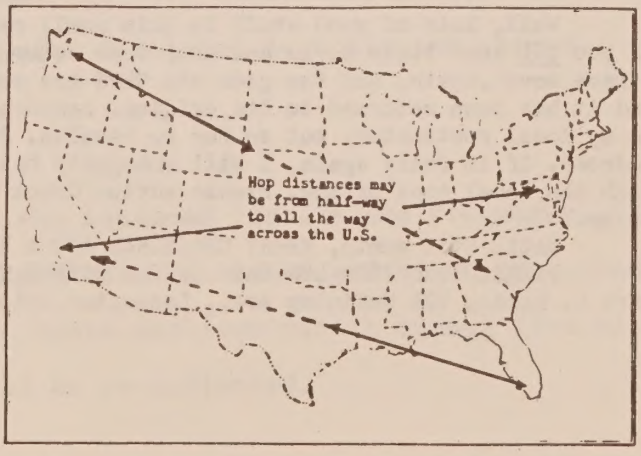
"The likelihood of F-layer skip can be characterized as follows:

(a) There is 50% chance around noon every winter day of about one year out of the 11-year sunspot cycle. (huh?)
(b) In the worst year, there occur about 90 total hours of skip.
(c) In the worst month, there occur about 30 hours of skip.
(d) In the worst day, skip occurs for two hours. (what?)

These suppositions would appear to be quite on the conservative side (by a factor of four in each case, I'd say). Previously, the FCC stated in Docket 80-189 that "it does not appear the Commission has received any complaints from operators or customers of.." the present two low-band paging channel systems. How do they know? How many times has a customer gotten a false page, muttered "#@% thing" and shut it off? Did they do a study on that?

Using the suppositions above (I guess?!), the bottom line in the study was that "since the present system of zoned frequency assignments provides protection from this type of skip, it may be desireable to make assignments at least initially on the basis of the existing zoned structure." From the Commissions language in the Docket, though, it would appear their desire to please the Radio Common Carrier interests and allocate the greatest number of channels may prevail.

Technical Memorandum #12 contains a number of highly complex charts and maps, such as this one.



LOW BAND SKIP

Mark S. Lucas
Editor

Send reception reports relating to distant stations received in the 30-50 MHz band plus any Low Band DXing tips, comments or articles to: Mark S. Lucas, 721 McKinley Ave., Lancaster, OH 43130. If you need a Low Band skip reception report form, send an SASE with your request.

Surprise! Yes, F2 skip has resumed here in the east in a big way. It is every much as exciting and interesting as the times before. So, what is stopping you good people from reporting it?? We have only two reporters this month, so it is somewhat lean before the "fat" of the F2 reports.

FROM DAVE (PA-038): "The fire station Andy (GA-015) heard, on June 29th., on 33.98 MHz callsign KWH 498 is East Stroudsburg Borough of Jackson TWP, PA.

"33.98 MHz is used for ambulance and fire in Monroe County area. It is also used in the Lehigh County area. All ambulances too are transmitted (dispatched) on this frequency. This is known as F1.

"Monroe County and Lehigh County Low Band via High Band is used to transmit messages to hospitals. Mountain ranges help reduce the heavy traffic."

FROM TERRY (IN-003):

		44.62 MHz	KIC 568	"Pikeville"		State PD
BASE	BC-210	7-14-80	2210 CDT	Pikeville,KY		320 Miles
		42.10 MHz	KSB 663	NO ID		State PD
BASE	BC-210	7-14-80	2311 CDT	HELP WITH LOCATION??		

(Editor's Note: It's possible it could be West Virginia State Patrol. I on occasion can pick up the above frequency out of Charleston, W.VA.)

		42.58 MHz	KUI 505	"Owosso"		State PD
BASE	BC-210	7-14-80	2330 CDT	Owosso,MICH.		200 Miles
		42.60 MHz	KXT 894	NO ID		State PD
BASE	BC-210	7-14-80	2348 CDT	Elwood,Ill.		280 Miles
		42.60 MHz	KSA 775	"MaComb (Dist.14)"		State PD
BASE	BC-210	7-14-80	2400 CDT	MaComb,ILL.		250 Miles
		42.52 MHz	KSB 236	"Effingham"		State PD
BASE	BC-210	7-14-80	2413 CDT	Effingham,ILL.		390 Miles
		32.82 MHz	NO CALL	NO ID	Spanish	Speaking
BASE	BC-210	7-18-80	0940 CDT	(This was a pager signal)		HELP!
		33.34 MHz	NO CALL	"Macon-One"		Petroleum
Mobile Rptr	BC-210	7-19-80	0950 CDT	Macon,GA.		800 Miles
		39.82 MHz	KQF 210	"Charlevoix Co."		PD
BASE	BC-210	7-17-80	2330 CDT	Charlevoix,Mich.		450 Miles
		42.46 MHz	NO CALL	"Omaha"		State PD
BASE	BC-210	7-18-80	1015 CDT	Omaha,NB		730 Miles
		44.70 MHz	NO CALL	"Oklahoma City"		State PD
BASE	BC-210	7-18-80	1730 CDT	Oklahoma City,OK.		500 Miles

Well, lots of good stuff in this small report. Where are the rest of YOU? If you DID send items to me and they were returned to you, my sincere apologies. I have moved,again, and the good ole USPS has somehow rejected all of my mail and it has been returned to its original sender. I have so far written two letters to my local postmaster, but so far no results. PLEASE try again at the below address. If it fails again, I will unhappily have to take more drastic measures with the local post office. Please advise Chuck Gysi so he can try to forward it to me.

Until next month, MERRY CHRISTMAS AND A HAPPY 1981!

PLEASE SEND YOUR LOW BAND SKIP LOGGINGS TO:

Mark S. Lucas, 721 McKinley Ave., Lancaster,Ohio 43130

CANADA

Send Canadian frequency information, radio system details and other information relating to Canadian monitor radio listening and questions to: Robert Berezowski, 5832 Dalhousie Drive NW, Calgary, Alberta T3A 1T1 Canada.

Hello to the Canadian column for January. I have received a letter from Steve (CAN-047). He has supplied a list for Lower B.C., part of which appears below. All members in B.C. listen up! He has asked for the frequency used by the CBC TV/Radio in Vancouver. Does any member have it? If you do, please send it either to me or to Steve. I know he will appreciate a prompt reply.

The following is a news release from the Ontario Ministry of Health. We can thank Chris (CAN-061) for this:

ONTARIO WILL ESTABLISH AN AIR TO GROUND
EMERGENCY AMBULANCE COMMUNICATIONS CHANNEL

TORONTO, June 9 -- Ontario becomes the first Province in Canada, with Federal Department of Communications (DOC) approval, to establish a precedent setting air-to-ground emergency ambulance channel for all standard aeronautical radios.

Health Minister Dennis Timbrell said that the new Air Ambulance Services Emergency channel frequency being reserved will permit all commercial and private aircrafts with standard aeronautical radios to communicate with major ambulance dispatch centres and hospitals in the event of medical emergencies.

"The time consuming and expensive need to install separate on-board radio equipment and antenna systems on aircraft will be avoided with this new single channel system. It will facilitate better co-ordination of patient transfer involving both air and ground transport," Mr. Timbrell said.

Proper procedures for use of the assigned 129.275 MHz frequency will shortly be established with commercial airlines and other concerned authorities. Frequencies for those stations within twenty five miles of the Canada/U.S. border will be co-ordinated.

One thing the release doesn't give is the date it goes into effect. I suppose it will be soon, the only constraint is the time necessary to install radios in the hospitals, probably a couple of months. They are correct when they say precedent setting. I do not recall anything similar anywhere in North America. The following is also from Chris:

Collingwood & Thornbury Police		142.515
Barrie Police		142.635
Midland Police		142.490
Innisfil Township Police		142.575
Orangeville Police		142.830
Orillia Police		143.265
Ontario Provincial Police	Aircraft	42.000
	Channel A	42.060
	Channel B	42.220
Grey County Fire	Mutual Aid	153.215
Simcoe County Fire	Mutual Aid	154.370
Vespra Township Fire		163.530
Ontario Provincial Ambulance I/S		150.100
Barrie/Orillia/Midland Ambulance		149.170
" " " "	& Simcoe County Rescue Squad Alert	149.440
" " " "	" " " "	154.545
CKVR TV News Barrie		153.485
CKBB/CKCB Radio News Barrie & Collingwood		153.170

Thanks a lot Chris and I hope that you will send us more info. The following is from Burt (CAN-011):

Police	St. Thomas	XJF-82	142.125
St. John Ambulance	London		153.455
CJBK/CJBX-FM	London	CJY-544	153.110
CKSL Radio	London	CJY-246	153.350
Free Press	London	XMA-256	171.330
P.U.C. (hydro)	London	XJG-45	169.290 R
P.U.C. (water)	London		167.670
Roads	N. Dorchester	XJJ-480	154.325
C.B.M.	Woodstock-London		171.600
Motorola	London	VCX-619	154.460
(this channel seems to be used by Motorola across Canada -ed)			
Superior Sanitation	Woodstock		166.650
Unit Farm Concrete Products	Woodstock	VCR-738	35.740
(Trucking Company, name unknown)	Woodstock (?)	CJQ-956	48.440
K-W Contractor	?	VCZ-549	34.020

Thanks Burt. A note to the contributers whose material I publish. When you see your information in the newsletter, please check it over completely for accuracy. I try to avoid as many mistakes as possible but I am not perfect. If some sort of discrepency (in my opinion) exists I usually put a question mark beside the information. If you see an error in the column anywhere, please <u>let me know</u> as soon as possible and I will print a correction in the next newsletter.

The following list is from Bruce (CAN-019) and provided by Alex (CAN-040). The agency is the Ontario Ministry of Natural Resources. The original chart could not be printed in the newsletter without the aid of a microscope. The format I will use may be a little confusing to some but if anyone wishes the original chart I will supply a copy if you write to me.

46.620 Ft. Frances, Terrace Bay, Bancroft, Kapuskasing, Sudbury
46.640 Ignace, Parry Sound, Moosonee Chapleau, Temagami, & East Region
46.680 Kenora, Geraldton, Timmins, Wawa, North Bay & Southwest Region
46.700 COMMON Channel
46.720 Northeast Region
46.740 COMMON Channel
46.780 Dryden, Nipigon, Algonquin Park, Espanola
46.820 Atikokan, Pembroke, Cochrane, S. Ste. Marie & Central Region
46.840 Red Lake, Thunder Bay, Bracebridge, Hearst, Kirkland Lake, Blind River

46.860 Sioux Lookout, White River, Minden, Gogama
46.880 Northwest Region, Algonquin Region, North Region
46.940 North Central Region
East Region: Brockville, Cornwall, Ottawa, Napanee, Tweed & Lanark
Southwest Region: Aylmer, Chatham, Owen Sound, Wingham, Simcoe
Central Region: Huronia, Cambridge, Lindsay, Maple, Niagara
Northwest Region: Ft. Frances, Ignace, Kenora, Dryden, Red Lake, Sioux Lookout
North Central Region: Terrace Bay, Geraldton, Nipigon, Atikokan, Thunder Bay, White River
Algonquin Region: Bancroft, Parry Sound, Algonquin Park, Pembroke, Bracebridge, Minden
North Region: Kapuskasing, Moosonee Chapleau, Timmins, Cochrane, Hearst, Kirkland Lake, Gogama
NorthEast Region: Sudbury, Temagami, Wawa, North Bay, Espanola, S Ste Marie, Blind River

VHF Air:	122.7	Air to Air, Primary Fire Control
	122.9	Air to Ground and Tanker Base
	123.2	Air to Air, Secondary Fire Control
HF (kHz):	4460	Northwest Region
	4535	North Central Region
	4889	North, Northeast, Algonquin Regions
	5540ssb	Air to Ground Provincewide
	9172	Long Distance Provincewide

Now we move over to the West coast and continue the lists for Lower B.C. It may look like I am discriminating against the B.C. lists by printing them last, but I am trying to balance out the column, printing some here and some there. Anyway, I have 4 lists for B.C. from Steve (CAN-047), Lloyd (CAN-059), and two unidentified contributers. I have combined them and the result follows.

Abbotsford	RCMP	Dispatch	139.350 S
Aldergrove	RCMP (?)		140.130 R
Burnaby	RCMP	Dispatch	138.555in/142.545 R
		Information	138.495in/142.935 R
Chilliwack	RCMP	Dispatch 1	139.770 S
		" 2	139.350
Coquitlam	RCMP	Dispatch	138.135in/142.125 R
		Info	138.825in/142.815 R
Fraser Valley	RCMP	Eastern Area	140.640 R
		Western Area	139.620in/140.130 R
Freeway RCMP			140.640 R
Haney	RCMP	Dispatch	141.500 S
Hope	RCMP (?)		140.100 R
Maple Ridge	RCMP	Dispatch 2	139.350
Mission	RCMP	Dispatch	139.350 S
Newestminister	Police		143.145
North Vancouver	RCMP	Dispatch	138.285in/142.275 R
		Info	138.225in/142.215 R
Richmond	RCMP	Dispatch	138.195in/142.185 R
		Info	138.795in/142.785 R
		TAC 2	139.320 S
		(conflict here, see last month. Which one? -ed)	
Saanich	Police		155.760 R
Surrey	RCMP	Dispatch	138.315in/142.305 R
		Info	138.765in/142.755 R
Squamish	RCMP	Dispatch	139.350
University of B.C.	Campus Security		155.265
	RCMP		140.430
Vancouver	Police XJF-779 or XJS-790	NW Dispatch #1	148.075in/143.085 R
		NE Dispatch #2	148.375in/143.385 R
		SE Dispatch #3	148.555in/143.565 R
		SW Dispatch #4	148.675in/143.685 R
		Tactical #5	148.015in/143.025 R
		Detectives #6	143.775
		"	143.145

CANADA CONTINUED

	RCMP XJA-43	Sechelt, Sunshine Coast		140.190 R
	(Also heard on TAC 1, Freeway Patrol & Special Use frequencies which are listed above)			
	Vancouver PD & RCMP Combined Law Enforcement Unit (CLEU)			
		Narco	F-1	143.235
		Vice	F-2	143.625
			F-3	143.775
			F-4	143.835
			F-5	143.475
			F-6	143.955
Victoria	Police	Dispatch	F-1	155.550
		Car-to-Car	F-2	155.490
West Vancouver	Police			151.325 R
White Rock	RCMP			139.350
			or	140.430
B.C. Health Services Ambulance/PM Dispatch (Province-wide)				149.110
				149.440
				149.590
				149.680
				149.830
				149.890

I think I'll stop at that point and continue next month. With luck this newsletter should arrive around the middle of December, so Season's Greetings to all and Happy New Year. I hope you all find that the big box under the tree is a new scanner or whatever! Until next year, happy listening!

International

Richard Stein, Editor

This column is for reporting two-way communications frequencies above 30 MHz, radio system details, monitoring experiences and any other information relating to monitoring in countries other than the United States and Canada.

Send to: Richard Stein, 456 Barrymore Pl., North Brunswick, NJ 08902.

•••ONE MAN'S OPINION•••

It has been more than one month since I wrote to the JIL Company concerning their SX-200 receiver. I have not had an answer of any sort from them. Maybe they don't take us seriously. With more than 2200 members that's hard to believe. Well, they had a good idea and a receiver that was potentially very desirable. Perhaps I should send them all of the correspondence about the SX-200 I've been receiving from the membership. Perhaps they ought to re-think their "non-answer". I think they've completely missed the boat of this one, and I'd bet they don't care. What a shame!

A note of thanx to all those members who have requested information on the elusive SX-200 and have sent a SASE. I will hold these in the event I hear something new.

•••GUAM-TRY FOR THIS LOW-BAND SKIP •••

George DuBois (OR-001) has received a verification from a Guam Cable TV company. Since this low-band skip is hitting the West Coast of the U.S., I have gone thru a 1974 set of microfiche listings for Guam and present them here to you. The listings are old- but you can use them as a starting point.

INTERNATIONAL CONTINUED

27.235	KES 953	Lujan Taxi- Agana
27.275	KLO 285	Allied Radio Cab-Agana
27.430	KFI 987	International Corporation-Agana
27.470	KJK 937	Raber Kief B-E-C-K, Agana
30.880	WAJ 962	Lujan Wreckers- Agana
	KT 3648	" " "
33.160	KWY 739	Lujan Wreckers- Agana
35.100	KWS 339	Commercial Sanitation- Dededo
35.180	KWS 339	Commercial Sanitation- Tanuning
35.700	KVW 309	Island Building System- Agana
	KWF 228	Sussex Electric Contractors- Agana
35.720	KUB 706	Guam Transportation- Agana
	KUB 707	" " - Calumet Park
	KO 7731	" " " "
35.900	KQT 425	Allied Electronics- Agana
37.060	KUA 311	Guam Government- Agana
37.120	KUA 311	Guam Government- Agana
37.260	KRC 676	Guam Government- Mangilan
43.000	KWC 513	Design Builders Inc.- Dededo
43.020	KGZ 419	Singer Sewing Machine Company- Dededo
43.120	KGZ 419	Singer Sewing Machine Company- Tamuning
43.860	KWE 460	Pacific Trucking- Agana
45.385	WAP 72	Jones and Guerrero Inc.- Agana
45.415	WAP 72	Jones and Guerrero Inc.- Agana
45.515	KNE 99	Holert Guam Internation- Barrigada
45.985	WAP 72	Jones and Guerrero Inc.- Agana
46.015	WAP 72	Jones and Guerrero Inc.- Agana
27.410	KES 696	Caribe Shipping Company- Charlotte Amalie
31.240	KYT 360	Caribbean Harbour Club - St. Thomas
35.060	KYP 486	Taylor Brown Hospital - St. Thomas
42.960	KM 2590	Tropic Deliveries - St. Thomas
43.020	KLT 548	Farnsworth Enterprises - St. Thomas
43.040	KQW 699	Seymore Kaplan-Sp.Indust-St. Thomas

Until next month-- שלום

MONITORING & THE LAW

Send all articles, references, copies of monitoring laws and questions pertaining to the legal aspects of monitor radio listening to:

EDITOR NEEDED!

We need a new Monitoring and the Law column editor. The editor of this column should have some familiarity with monitoring laws and it would be desireable if he/she had a collection of monitoring laws from around the nation. This editor would be required to generate some information for the column as well as organize input from the general membership. If you are interested, please TYPE a letter telling about yourself and qualifications to: RCMA Managing Editor, P.O. Box 216, Willow Grove, PA 19090.

Beginners ??? Corner

Have a question? If you are a new scanner listener and don't understand something about monitoring that most everyone else seems to understand, send in your question. When possible, your question and the answer will be printed. No answers will be sent by return mail. Your name will not be printed. Write to: David E. Crowley, 7234 Balson Ave., University City, MO 63130.

Q. If I hook my BC210 to a timer which shuts off its AC power for about 20 hours a day, what kind of life could I expect from the memory battery?
A. The BC210 (programmable scanner) manual cautions against interrupting its power source, in favor of turning the unit off with the on-off/volume control. Although this is not entirely clear to me, a small amount of power to keep the memory alive. When the unit is unplugged, the 1.5V battery performs this keep-alive function. My educated guess is that keeping the memory alive requires very little current from the battery and that battery life, in your application, should not be significantly shorter than its shelf life.
Your Beginners Corner editor will welcome a new "Technical Topics" editor to handle questions like this. As you can see, this question exceeded my technical knowledge. If anyone has a better answer, please let me know.

Q. I have just lost my (Antenna Specialists) MON R31 outside antenna to a windstorm, but reception using only the whip antenna supplied with the scanner is not noticeably worse. Was my outside installation bad, or does an outdoor antenna make only a small difference?
A. Obviously I cannot provide a definitive answer, but I will share my personal opinion with you. If you live in an area, like a city, with many signals crowding the airwaves, the outside antenna will improve the reception of the interfering signals as much as is does for the desired signals. In this case, you might be best off using only the supplied indoor whip. On the other hand, if you live in a rural area with few interfering signals, the outdoor antenna should improve reception considerably.

Q. What do the terms "itinerant" and "image" frequencies mean?
A. An itinerant frequency is one on which the FCC allows itinerant operation - defines as - "Operation of a radio station at unspecified locations for varying perions of time" (FCC Rules: Part 90.7) For image frequencies see below.

Comments for the month: A reader has kindly provided information on Electronic Signal Products(350 N. Eric Drive, Palatine, IL 60067, 312-934-8110) which I listed as a supplier of scanner accesories in the July 1980 Newsletter. ESP Inc. does not sell scanner accesories at all, but is a consulting and engineering firm which designs communications systems and manufactors transmitters and receivers for custom applications. Our reader was cordially welcomed by ESP Inc. when he finally tracked them down and specific information on their services and products was provided.
About the image frequencies - This phenomenon, so useful to monitor listeners, seemed, on the surface,easy to explain. However a four-hour assault with algebra and pocket calculator failed to beat this topic into submission for a clear presentation to you. By next month I hope to have removed the algebraic anomalies, so that I can say something intelligent about image reception.
I must apologize to my readers for my abominable typing ability. What appear to be ungrammatical or awkward contructions are in fact the result of my efforts to reconstruct a sentence after discovering, several lines later, that I omitted a whole word or two. I buy Liquid Paper in 55 gal. drums.

In the May Newsletter, I listed a few of the government publications relating to monitor listening, many without price information. However, just last month I happened onto the Subject Bibliographies, Subject Bibliography Index and Government Periodicals and Subscription Services, Price List 36, all free from the U.S. Government Printing Office, Washington, DC 20402. When you write, ask also for the Consumers Guide to Federal Publication. If you are a collector of arcane government publications, such as the Department of Defense Telephone Directory, the materials above are a must. Reproduced below is part of the FCC Publication Bibliography.

Federal Communications Commission Publications

Federal Communications Commission Rules and Regulations: *Subscription service of each Volume listed below includes supplementary material for an indeterminate period. In looseleaf form, punched for 3-ring binder.*

Volume I. May 1980. Subscription price: Domestic - $16.00; Foreign - $20.00
[FCV01] (File Code 1D) CC 1.6/1:980

Contains FCC Parts:

0. Commission Organization.
1. Practice and Procedure.
13. Commercial Radio Operators.
17. Construction, Marketing, and Lighting of Antenna Structures.
19. Employee Responsibilities and Conduct.

Volume II. August 1976. Subscription price: Domestic - $12.50; Foreign - $15.75.
[FCV02] (File Code 1D) CC 1.6/2:976

Contains FCC Parts:

2. Frequency Allocations and Radio Treaty Matters; General Rules and Regulations.
5. Experimental Radio Services (Other Than Broadcast).
15. Radio Frequency Devices.
18. Industrial, Scientific, and Medical Equipment.

Volume III. March 1980. Subscription price: Domestic - $34.00; Foreign - $42.50.
[FCV03] (File Code 1D) CC 1.6/3:980

Contains FCC Parts:

73. Radio Broadcast Services
74. Experimental, Auxiliary, and Special Broadcast and Other Program Distributional Services.

Volume IV. 1977. Subscription price: Domestic - $24.00; Foreign - $30.00.
[FCV04] (File Code 1D) CC 1.6/4:977

Contains FCC Parts:

81. Stations on Land in the Maritime Services
83. Stations on Shipboard in the Maritime Services.

Volume V. 1979. Subscription price: Domestic - $15.00; Foreign - $18.75.
[FCV05] (File Code 1D) CC 1.6/5:979

Contains FCC Parts:

87. Aviation Services.
90. Private Land Mobile Radio Services.
94. Private Operational-Fixed Microwave Service.

Volume VII. March 1974. Subscription price: Domestic - $14.00; Foreign - $17.50.
[FCV07] (File Code 1D) CC 1.6/7:974

Contains FCC Parts:

21. Domestic Public Radio Services (Other Than Maritime Mobile).
22. Public Mobile Radio Services.
23. International Fixed Public Radio-Communication Services.
25. Satellite Communications.

Volume VIII. 1978. Subscription price: Domestic - $5.10; Foreign - $6.40.
[FCV08] (File Code 1D) CC 1.6/8:978

Contains FCC Parts:

31. Uniform System of Accounts for Class A and Class B Telephone Companies.
33. Uniform System of Accounts for Class C Telephone Companies.

Volume IX. 1976. Subscription price: Domestic - $3.60; Foreign - $4.50.
[FCV09] (File Code 1D) CC 1.6/9:976

Contains FCC Parts:

34. Uniform System of Accounts for Radiotelegraph Carriers.
35. Uniform System of Accounts for Wire-Telegraph and Ocean-Cable Carriers.

Volume X. July 1, 1977. Subscription price: Domestic - $10.00;
Foreign - $12.50.
[FCV10] (File Code 1D) CC 1.6/10:977

Contains FCC Parts:

41. Telegraph and Telephone Franks.
42. Preservation of Records of Communication Common Carriers.
43. Reports of Communicable Common Carriers and Certain Affiliates.
51. Occupational Classification and Compensation of Employees of Class A and Class B Telephone Companies.
52. Classification of Wire-Telegraph Employees.
61. Tariffs.
62. Applications to Hold Interlocking Directorates.
63. Extension of Lines and Discontinuance of Service by Carriers.
64. Miscellaneous Rules Relating to Common Carriers.

FCC Rules and Regulations - con.

Volume X. - con.

66. Applications Relating to Consolidation, Acquisition or Control of Telephone Companies.
67. Jurisdictional Separations.
68. Connection of Terminal Equipment to Telephone Networks.

Volume XI. Subscription price: Domestic - $15.00; Foreign - $18.75.
[FCV11] (File Code 1D) CC 1.6/11:976

Contains FCC Parts: (Formerly Contained in Volume III.)

76. Cable Television.
78. Cable Television Relay Service.

Federal Communications Commission Rules and Regulations:

Part 95, Radio Service, Subpart A, General Mobile Radio Service. 1977.
19 p. CC 1.7:95/subpart A S/N 004-000-00340-3 $ 1.00

Part 95, Radio Service, Subpart D, Citizen Band Radio Service Rules.
1978. 56 p. il. CC 1.7:95/subpart D/978
S/N 004-000-00356-0 1.25

Part 97, Amateur Radio Service. 1979. 28 p. il.
CC 1.7:97/3 S/N 004-000-00357-8 1.40

How to Identify and Resolve Radio-TV Interference Problems. 1977.
31 p. il. CC 1.7/4:In 8 S/N 004-000-00345-4 2.00

photo department

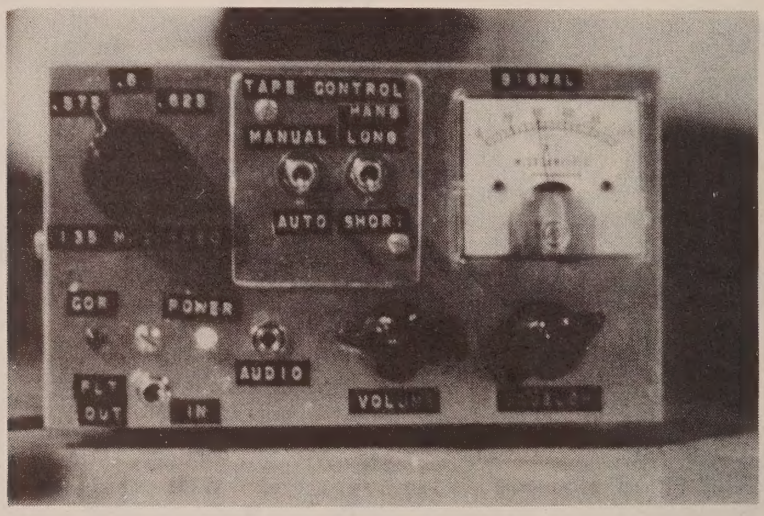
Send photographs of custom monitor listening posts, unusual or extensive monitor or two-way antenna systems, user station consoles (PD, Fire, Paramedics, etc.) or other monitor/two-way related equipment of interest. Photographs must be 3 x 5 inches or larger, black-and-white with good contrast, sharply focused and attractively composed. Each photo must be accompanied by details and explanations of equipment. Photos will not be returned. If you have questions, write first and please include an SASE. Send photos or write to: Mike Redman, P.O. Box 1177, St. Charles, MO 63301.

Hello! My name is Bandit, and my owner, Jerry (OH-015), has found a new way for me to live my nine lives. I am a little over one year old, and a Manx cat. I enjoy my master's hobby of scanning. I really get my ears full, and it sure beats lying in front of a TV set. Now, I can cat-nap in style resting on his scanners. I prefer the BearCAT myself, it's so much fun to play with-with all the pads to touch, but the Regency has a nice wood case that my master keeps so slippery, I can't even hardly keep my paws on it, let alone scratch it. The cats-meow is when we go camping. As you can see in the photo, I have it made! My master takes all his scanners so he can keep up on the news in the area he and his family are enjoying, plus rest and relaxation. Speaking of rest and relaxation, I'll just curl up on these scanners, and use the RusScan 10 for a sort of pillow, to take a nap and end this 'Tail', which, by the way, I'm minus. Have a Purr-fect Day!

Thanks to Jerry (OH-015) for mailing Bandit's letter and photo. Jerry,I really think you ought to sign him up as an RCMA member! Our other contribution this month comes from DAVE (IL-056). Dave submits a photo of his VHF Engineering Model RX144C ATS Satellite Receiver. This was built and customized by Dave. It receives on 135.575, 135.600, and 135.625 Mhz, FM mode. Dave also customized a tape control circuit for more flexibility and have a switch-selectable audio filter. He also uses a Bearcat 210 and a Regency ACTR 10HLU. For antennas, Dave uses a three element yagi beam aimed at the ATS3 satellite, and an 11 element beam for 2 meter amateur band reception. He recently completed a homebrew 10 element crossed yagi (5 horizontal and 5 vertical elements). This crossed yagi provides circular polarization which reduces fading during the signal polarization changes of the received ATS signals.

Thanks a bunch for that photo and explanation, Dave, and how about sending a photo of the beam and instructions on how to build it?

Back next month with more exciting photos!



VHF Marine

Rod O'Connor, Editor

Send information, articles, frequencies and how they are used and questions that relate to private, commercial and Coast Guard VHF maritime and inland waterways radio communications to: Rod O'Connor, USCG Group, 259 High St., South Portland, Maine 04106.

This month the Coast Guard's Vessel Traffic System in Puget Sound, Washington is being featured. The System is very similar in operation to the previously described system in Houston-Galveston.

Several remote radar sites monitor shipping traffic throughout the Puget Sound shipping lanes, and relay the sightings to a central control center in Seattle. Practically all traffic in the Straits of Juan de Fuca, Rosario Straits, and the numerous bays and harbors around Puget Sound are under surveillance. Communications are maintained by VHF-FM frequencies, with Channel 14 (156.70 mhz) the primary channel. Also commonly used are VHF FM Channels 13 (156.650); Channel 6 (156.300) and Channel 12 (156.600).

COMMUNICATION RULES

The rules in sections 161.120 through 161.136 below apply to "radio equipped vessels"

§ 161.120 Radio listening watch.

The master of a vessel in the VTS Area shall continuously monitor the radio frequency designated in the current edition of the Puget Sound VTS Operating Manual for the sector of the VTS Area in which the vessel is operating, except when transmitting on that frequency.

VHF-FM Channel 14 (156.7 MHz) has been designated as the radiotelephone frequency for the entire VTS Area, and will be used to transmit and receive vessel movement data, and other maritime safety information. SEATTLE TRAFFIC is the radio call sign. Radio procedure will be in accordance with the Radio Regulations promulgated by the International Telecommunications Union.

Four remote receiver/transmitter sites are located around the Puget Sound area for total coverage:

1.	Bahokus Peak	Cape Flattery	1600 ft
2.	Mount Constitution	Orcas Island	2750 ft
3.	Gold Mountain	Kitsap Peninsula	1900 ft
4.	West Point	Seattle	100 ft

Each transmitter has a range of approximately 50 miles and is keyed remotely from the Vessel Traffic Center in Seattle.

To preclude the probability that calls from the many small craft on the sound may overload the Vessel Traffic Service Frequency, recreational vessels are requested to minimize communications with the Vessel Traffic Center on channel 14. Those recreational craft that have the capability to guard two channels simultaneously are encouraged to monitor channel 14 when actually navigating within a traffic lane or precautionary area. Passive monitoring of channel 14 will yield much information on major vessel movements, special operations, the status of aids to navigation, etc., without congesting the frequency.

Also this month, a few odds and ends to share:

The July-August issue of MARINER'S WEATHER LOG advises that the F.C.C. has granted approval for the use of VHF Channel 17 (156.85 mhz) by Public Coast Stations on the Great Lakes to transmit weather broadcasts utilizing both voice and facsimile transmissions. Marine-Radio Station WMI Lorain, Ohio is seeking license modification so that they may begin using Channel 17 for weather broadcasts in Spring of 1981/ WMI Radio presently makes voice and facsimile broadcasts on VHF Marine Operator channels 26, 84, 85, and 87.

Tom (LA-003) reports that the Harbor Police of the New Orleans Port commission uses marine channels 12, 13, 16, and 20. (This is the first time I have ever seen Channel 20 put to use!!)

Tom also advises that Louisiana Wildlife and Fisheries units may be found operating on any VHF Marine channel, while working in the lakes, bayous, and coastal portions of the state.

Finally, according to Tom, the New Orleans River Pilots Association which is an organization of pilots which steer vessels along the Mississippi River from the mouth to New Orleans makes use of frequencies 155.835 and 155.100 mhz for co-ordination and docking of ships.

Thanks much Tom for the info: I am always happy to publish unusual or uncommon info such as this for the benefit of other members. Other members are cordially invited to share their information with the rest of us. So far this fall, very little information has been received. Don't be shy.

SATELLITES

Bill Blomgren, Editor

Send information about satellite frequencies which you have received with type of traffic heard, orbital data, hobby receiving equipment and antennas and questions pertaining to satellite monitoring to: Bill Blomgren, 112 Sandra Lane, Normal, IL 61761.

EDITOR NEEDED!

We need a new Satellites column editor effective immediately. The editor of this column should be familiar with satellite systems and communications and should be an active satellite monitor. The editor also should have a knowledge of the history of older satellite systems and be familiar with upcoming new systems. This editor would be required to generate most of the copy for this column. If you are interested, please TYPE a letter telling about yourself and qualifications to RCMA Managing Editor, P.O. Box 216, Willow Grove, PA 19090.

This month's column will be devoted entirely to a letter received from Dave Ewing (IL-056). I feel that this letter will be of interest to all ATS satellite listeners and so I am presenting it in its entirety. Thanks, Dave, for this fine information.

ATS-3 Satellite Downlink Observations

My recently completed homebrew crossed yagi antenna (5 elements by 5 elements) is a real improvement over my 3 element vertically polarized yagi antenna both of which are pointed toward the ATS-3 satellite. The three element yagi antenna produces occasional deep fades during reception. On downlink signals there is also a slight flutter which occurs about once each second. This flutter is observed on both antennas and may be due to satellite spin. The received signals using the 3 element yagi antenna are almost full quieting at times but can also fade below audibility. These deep fades are not observed when using the crossed (circular polarized) yagi antenna.

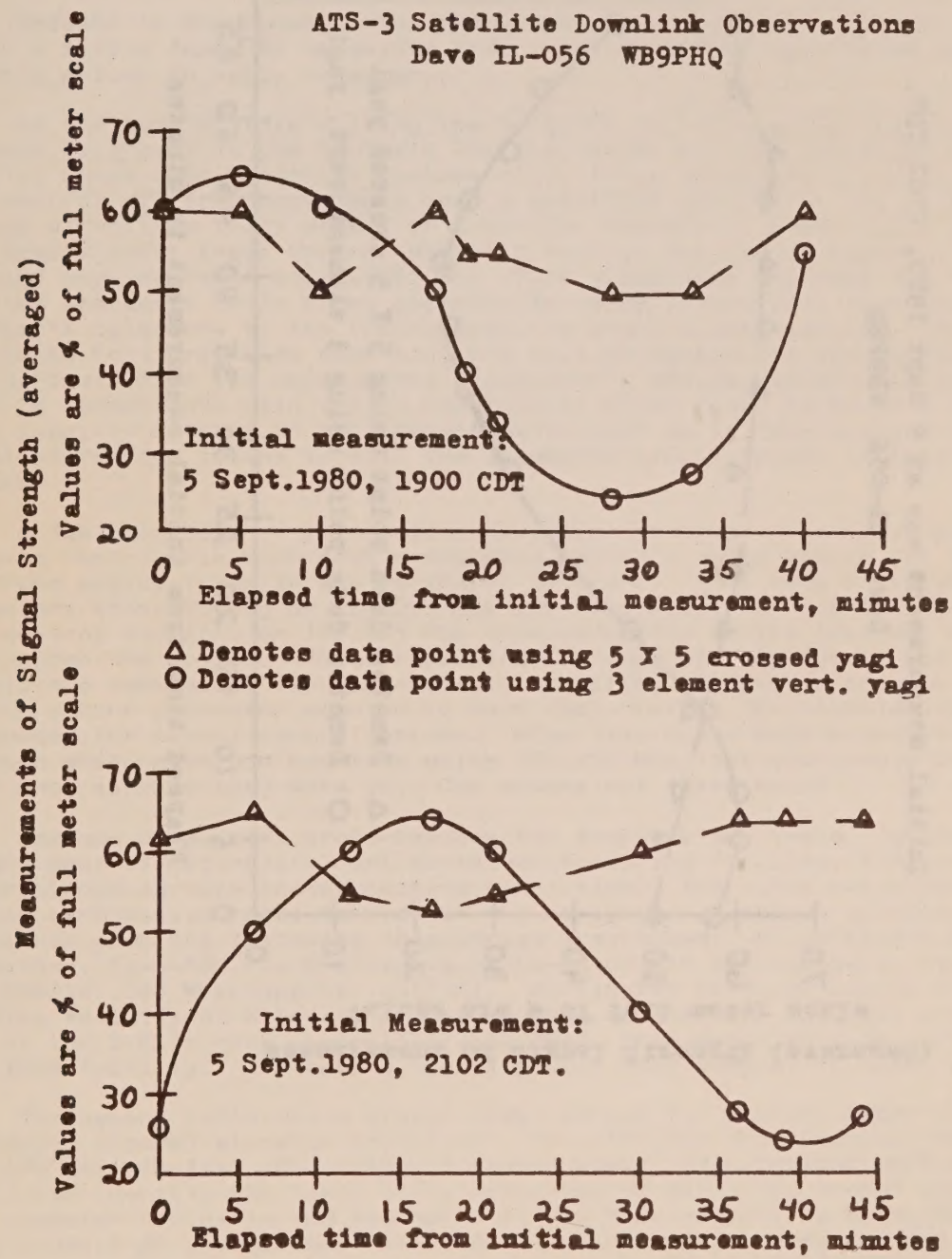
An attempt was made to compare the received ATS-3 downlink signal strengths between the 3 element vertically polarized yagi antenna and the 5 element circularly polarized crossed yagi antenna. A customized receiver on 135.575 MHz was used for this test. This comparison indicates the effects of the changing received signal polarization (Faraday's Rotation) when using a vertically polarized antenna. When using the 3 element yagi antenna, a vertically polarized signal will produce a maximumized received signal, while a horizontally polarized signal will be at minimumized signal strength to the receiver.

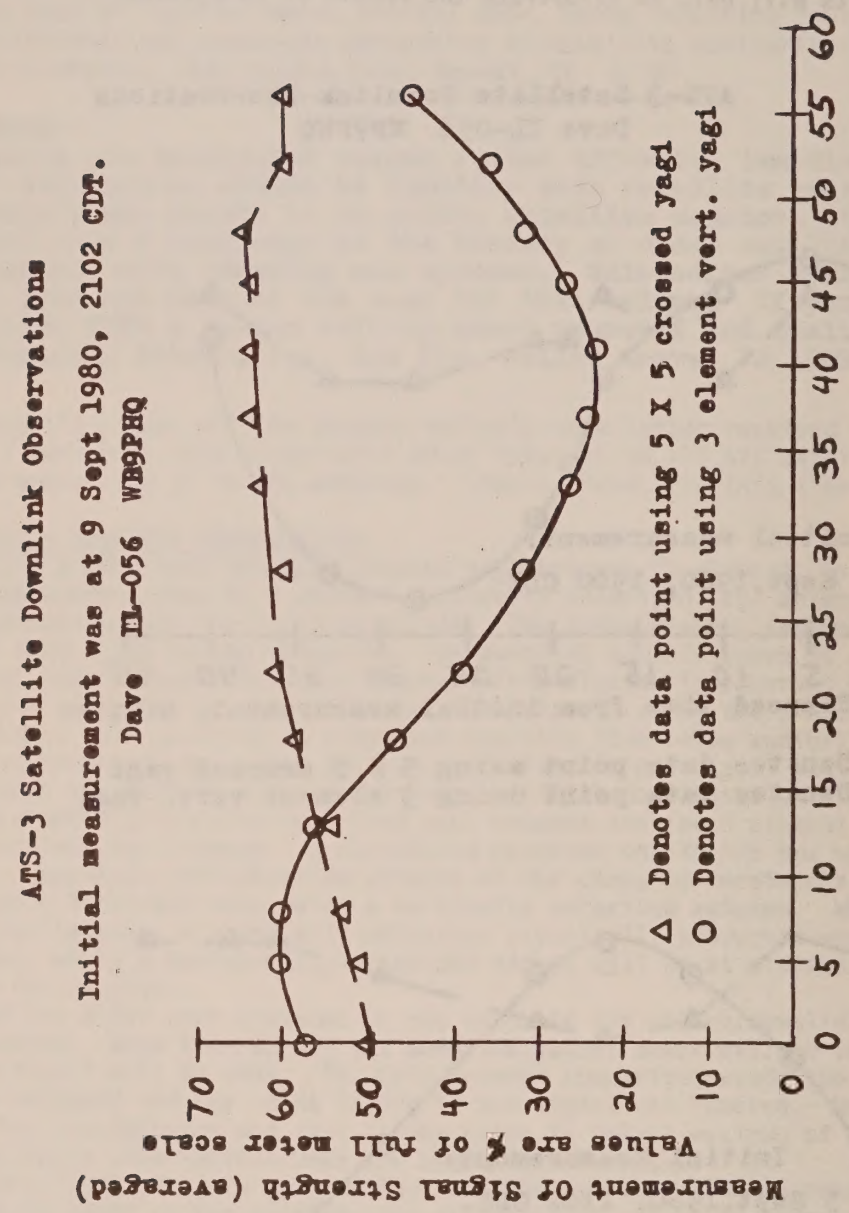
Some of the ATS-3 user stations do not saturate the uplink/downlink translator on the satellite. When this occurs the downlink output power will be less than maximum and the signal will be weak. For this antenna comparison study the strongest station was measured and any rapid fading of the signal was ignored. Not every hour of the day has transmission and this is why there is only a maximum of one hour at a time of continuous observations made for comparison purposes.

The signal strength data point values are the average value as measured on the signal strength meter of the receiver and are relative values for comparison only. A typical test was to first measure the signal strength using the crossed yagi antenna. Then the signal strength was measured using the 3 element yagi antenna. A final check was again made using the crossed yagi antenna to insure that the signal strength had not changed. These measurements were made at various times during the transmissions. A typical signal strength meter reading of 40% of full scale or higher was considered a readable signal. A signal strength meter reading of 18 to 20% of full scale was usually present when no signal was being received. This project was intended for my own use so it is not presented as a full how to do it article. I just think it's interesting.

Summary

It was noted that only slight fading occurred when using the homebrew crossed yagi while deep fading occurred when using the 3 element vertically polarized yagi. The data indicates that a fading cycle usually occurred during each hour of observation. The duration of the fade cycle may be variable due to a number of factors. The downlink flutter effects which result in varying receiver signal strengths was observed on both the crossed yagi antenna and the 3 element vertical yagi antenna. The following charts will help to illustrate the result of this study.




ATS-3 Satellite Downlink Observations
Initial measurement was at 9 Sept 1980, 2102 CDT.
Dave EL-056 WB9PHQ
Measurement of Signal Strength (averaged)
Values are % of full meter scale
70
60
50
40
30
20
10
0
0 5 10 15 20 25 30 35 40 45 50 55 60
Elapsed time from initial measurement in minutes
Δ Denotes data point using 5 X 5 crossed yagi
O Denotes data point using 3 element vert. yagi

Railroads

Ken Fitzgerald, Editor

Send information about railroad frequencies and their uses, radio system details, tips for monitoring railroads, explanations of railroad jargon and related information and questions to: Ken Fitzgerald, 121 East Hackberry, Enid, OK 73701.

Welcome to the January "Railroads" column and a happy new year! It feels a little funny to be saying that since deadlines require me to type up this column in early November.

At the time of this writing the Santa Fe is rapidly joining the ranks of such railroads as the Southern Pacific, Union Pacific and Missouri Pacific whose communications systems allow train dispatchers(supervisors who control all train movements over a specified section of the railroad by way of written train orders or trackside signals)to communicate with all trains under their control directly through the use of remotely controlled wayside radio base stations. This eliminates the need for the nearest station's train order operator to relay information from the dispatcher's telephone to the trains over the depot's base station. All of the Santa Fe's trackside base stations will be controlled via wireline and/or microwave from the appropriate dispatcher's office, which will allow them to communicate with trains hundreds of miles away, 24 hours a day. More specific details on this development--such as if tone-access will be involved for the trains to call the dispatcher--will follow in future columns.

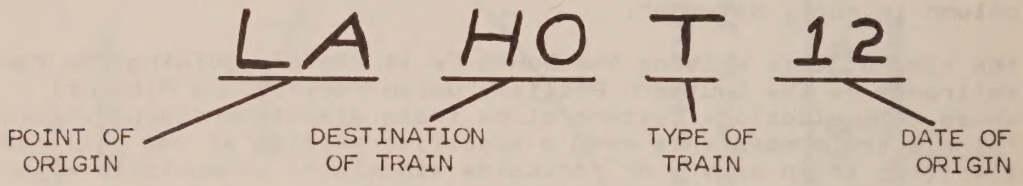
A few more bits of information have been received from Mike(LA-008) after a recent trip back east concerning Amtrak's radio system for their railroad police force in the northeast corridor. They have a series of repeaters transmitting on 161.295 Mhz and receiving from mobiles, portables and control stations on 160.365 Mhz throughout the entire corridor between Washington and Boston. These repeaters are very closely spaced and as a result are controlled via tone-access, requiring the proper code be punched out on a tone generator mounted to each radio before the repeater can be activated for normal communications. Mike also heard maintenance crews between Washington and New York using 160.515 Mhz, but was unable to identify what service they were in. Can anyone out there help?

And now a few more brain-teasers for everyone out there. While on a recent tour of Motorola's Fort Worth manufacturing facility, I discovered two railroad service radios nearing completion. The first was a new Syntor synthesized radio marked for the Burlington Northern at Allouez, Wisconsin with the following frequencies programmed: F1---160.410 Mhz (simplex), F2---160.710 Mhz(simplex), F3---160.515 Mhz(simplex), F4---160.590/161.565 Mhz(repeater out/in). Burlington Northern has an ore loading facility at Allouez, and since none of the four channels programmed is the B.N.'s road channel(161.100 Mhz), this radio must be exclusively for that facility. Can anyone identify what each channel is used for?

The second radio was a Mitrek model marked for Conrail Metro with the following channel elements installed: F1---161.280 Mhz(simplex), F2---161.070 Mhz(simplex), F3---160.410 Mhz(simplex), F4---161.160 Mhz(simplex). Now I can identify the first three channels, F1 being the "road" channel for commuter trains in the New Haven to New York region; F2 being Conrail's road channel #2 systemwide; F3 being the maintenance of way channel in the New Haven to New York region; but I do not know the usage of F4(161.160). Once again, can any member in that area help? One interesting note is this radio and several others identical nearby were all equipped with touch-tone decoders so that an encoder equipped mobile or base station can honk the vehicle's horn or turn on its headlights to signal those nearby they need to come to the radio. While being very heavily used in the business radio field, this equipment has been rare on the railroad up until now.

To help those of you who monitor Southern Pacific's train operations on 161.550 Mhz among other channels, here is a list of their train identification symbols to make your listening more meaningful. These are the codes used to identify individual trains when calling them over the radio, and as you will see, there is a wealth of information packed into each one you hear. Since from my location in Oklahoma I have little opportunity to directly monitor Southern Pacific's radio transmissions, any additions or corrections from on-line members would be greatly appreciated.

SOUTHERN PACIFIC TRAIN SYMBOLS



TYPES OF TRAINS

A, B -------- Auto Parts Load
H, J -------- Auto Parts Empties
K ---------- Chemical
D ---------- Drag
X ---------- Paper Service Empties
F, G -------- Forwarder
E ---------- General Empties
M ---------- Mail
Y, Z, W, V --- Manifest
P ---------- Perishable
R ---------- Refrigerator Cars
S ---------- Sugar Beets
Q ---------- Sugar Beet Empties
T, C --------- Trailers or Containers
U ---------- Unit Train
N ---------- Unit Train Empties

POINTS OF ORIGIN AND DESTINATION

AL ------ Albina(U.P. Yard)
AS ------ Alton & Southern RR
AT ------ Santa Fe RR
AV ------ Avondale
BE ------ Beaumont
BK ------ Bakersfield
BN ------ Burlington Norhtern RR
BO ------ Baltimore & Ohio RR
BR ------ Brooklyn(Portland)
CC ------ Corpus Christi
CH ------ Chicago
CI ------ City of Industry
DA ------ Dallas
DN ------ Denison
DO ------ Dolores
EC ------ EL Centro
EG ------ Eagle Pass
EN ------ Ennis
EO ------ East Oakland
EP ------ El Paso
MP ------ Missouri Pacific RR
MY ------ Mormon Yard(ATSF Stockton)
NG ------ Nogales
NP ------ North Platte
NW ------ Norfolk & Western RR
OA ------ Oakland
OG ------ Ogden
PB ------ Pine Bluff
PC ------ Penn Central
PT ------ Portland Terminal
ER ------ Eureka
ES ------ East St. Louis
EU ------ Eugene
FR ------ Fresno
FW ------ Fort Worth
GM ------ Gemco
GU ------ Guadalupe
HO ------ Houston
IC ------ Illinois Central Gulf RR
JO ------ Jonesboro
KA ------ Kaiser
KC ------ Kansas City
KF ------ Klamath Falls
LA ------ Los Angeles
LC ------ Lake Charles
LF ------ Lafayette
LN ------ Louisville & Nashville RR
MF ------ Memphis
MI ------ Miltipas
ML ------ Milwaukee RR
SF ------ San Francisco
SJ ------ San Jose
SK ------ Sparks
SL ------ Siskiyou Line
SM ------ Skidmore Line
SO ------ Southern RR
SR ------ Strang
ST ------ Stockton
TK ------ Texarkana
TO ------ Torrance

RAILROADS CONTINUED

PX ------ Pheonix
RD ------ Redding
RG ------ Rio Grande RR
RI ------ Rock Island RR
RM ------ Richmond
RO ------ Roseburg
RV ------ Roseville
SA ------ San Antonio
SC ------ Seaboard Coast Line RR
SD ------ San Diego
TP ------ Texas & Pacific RR
TR ------ Tracy
TU ------ Tucson
TY ------ Tyler
UP ------ Union Pacific RR
WC ------ West Colton
WI ------ Willits
WJ ------ Watsonville Junction
WS ------ Warm Springs
YU ------ Yuma

That's it for now. If any members can provide train identification information such as this for the railroad in their area, please send it in. Having the proper frequencies isn't much use if you don't have any idea what it is you are listening to. Keep those contributions coming!

FEDERAL GOV'T and ★ MILITARY ★

Robert B. Grove, Editor

Send all Federal Government and Military frequencies (including those of military aircraft), radio system details, and related questions to: Robert B. Grove, Route 1-Box 156, Brasstown, NC 28902. Sensitive frequencies will not be published. Coast Guard material must go to the VHF Marine editor.

TO PUBLISH OR NOT TO PUBLISH, THAT IS THE QUESTION. Letters are arriving hot and heavy both for and against the publication of sensitive federal law enforcement frequencies. A thumbnail poll shows the liberals far ahead of the conservatives on the issue. A recent letter from Steve (KS-011) is a case in point; he strongly feels that the information should be made available to the public. On the distaff side, one of our editors (probably more than one) vehemently objects to such disclosure, premised on the suspicion that this would ultimately lead to much tighter security measures to protect voice transmissions as well as possible penalties against listening. How do the rest of you feel?

ERRATA: For those of you that have purchased my book COMMUNICATIONS MONITORING, I have discovered a minor error in a circuit diagram. On page 110, pin 1 of the 566 IC should be grounded, otherwise the voice descrambler circuit will not operate.

FREE VOLTAGE: For those of you who are considering using the DC terminal on the back of your scanner for an accessory voltage source, a few more comments. While the voltage is well-filtered, it is not regulated. Do not draw more than approximately 100 milliamperes of current continuously or you run the risk of burning out the internal power transformer. The radio is not fused and excessive current will have no protection.

THE JIL-SX-200. I recently had an opportunity to use an advance model of the new JIL-SX-200 programmable scanner. It is due for American distribution in about 6 months. While sensitivity, appearance, flexibility and frequency limits are quite good, the SX-200 suffers from the same intermod and image problem as its predecessor, the SX-100. If you are in a metropolitan area, be prepared to hear everybody at once unless you have some means of external filtering and preselection.

And now let's have a look at this month's frequency contributions!

From BILL (CA-SB-024) NORTON AFB FREQUENCIES

119.450	Control tower
121.800	Ground Control and Clearance Delivery
130.650	63rd MAW Command Post air-to-ground
148.150	Civil Air Patrol (input 143.900..ed.)
148.215	Base taxi and Air crew bus dispatcher
149.505	POL (petroleum, oil and lubricants) refueld truck dispatching
163.4875	Security Police and law enforcement
163.5625	63rd MAW Command Post (repeats 130.650 and 349.400)
163.5875	Fleet and Passenger Service
165.0375	Transient Alert dispatcher and Control Tower to mobile V.V.
165.1375	Civil Engineers dispatching
173.4375	Maintenance Control dispatching for crew chiefs
173.5375	Maintenance control dispatching for shop specialists
173.5625	Maintenance control dispatching for ground support equipment.
413.375	Fire and crash crews; rescue.

NOTE: Norton AFB is also equipped with local mutual aid 154.280, 154.325 and 154.385.
Thanks, Bill for an outstanding list of specialized frequencies!

We are privileged this month to have shared with us an unusual list of Canadian Army base assignments from several provinces.
From MICHAEL (Quebec)
Valcartier Army Base, Quebec

CH.	FREQ.	USE
1	172.470	
2.	172.560	Administration; artillery range
3.	173.460	Fire department
4.	173.370	Control tower
5.	173.250	Military police
6.	173.580	Artillery range security
7.	173.670	Vehicle transportation
8.	49.90	Artillery range
9.	45.80	Helicopter and control tower
10.	40.50	Helicopter and control tower (emergency evacuation)
11.	43.80	Administration and artillery range
12.	245.100	Field range
13.	258.700	Field range
14.	307.600	Control tower (primary)
15.	126.200	Helicopter and control tower
16.	243.000	Emergency and control tower
17.	121.500	Civil emergency and control tower
18.	173.160	Research center
19.	173.220	Research center
20.	173.280	Research center
21.	154.570	Munitions industrial security

MONTREAL ARMY AND NAVY
156.275
157.425
161.800
162.000

BORDEN, ONTARIO ARMY BASE

149.350	Transportation
149.440	Rescue squad
149.680	Fire department
173.250	Military police
38.40	Land forces mobile
40.80	Land forces mobile
43.30	Land forces mobile

45.80 Land forces mobile
42.40 Mobile ops.
44.30 Mobile ops
44.90 Mobile ops.
BRITISH COLUMBIA (PROVOST)
149.140
149.650
149.350 (Chilliwack)
149.230 (Chilliwack)
Thanks, Michael for sharing such a nice list with us!

From TOM (IL-080)
155.115 Southern Illinois Airport Security (new assignment)
168.775 Vienna Correctional School; also US Forest Service (Murphysboro)
170.875 Marion maximum security Federal Prison
172.225 US Department of Agriculture, Murphysboro and Jonesboro
Thanks, Tom

From TOM (LA-003) LOUISIANA AREA
162.0125 NASA Missile barges
163.000 VA paging; shared with US Army Corps of Engineers
162.125 GSA paging
163.4125 US Army Corps of Engineers
164.275 DOE paging
164.9375 US Dept. of Agriculture, Forest Service link/Kisatchie National Forest
169.925 " " repeater output
170.525 " " repeater input
165.3125 US Public Health Hospital, Carville, LA
165.7625 FAA telemetry
169.375 FAA telemetry
166.175 FAA maintenance
167.825 DOE channel 1 KFW698 repeater output
Callsign for Federal Protective Service in New Orleans is KPA802.

Tom also has one correction from our July 1980 column. The NASA frequency should read 173.7375, not 173.7875 MHz. Tom asked what the abbreviations "LMIC" and "LSUP" stand for in the FEDERAL FREQUENCY DIRECTORY. These are Lake Michigan and Lake Superior. IRAC (Interdepartment Radio Advisory Committee) insists upon certain standard abbreviations when agencies submit applications for frequency assignments. Often, all the vowels are left out, confusing the casual reader. Unless you actually live near the assigned transmitter site, the abbreviations can drive you bananas. For example, how about RWWTRINT, LA on 406.650? Some can be figured out if you really try....LANT CSTLWTRS is Atlantic Coastal Waters. Some fun! Thanks, Tom for this month's contribution.

From CHUCK (IL-141)
163.5375 US Army Corps of Engineers, Rend Lake. Mobile and marine units.
170.925 Marion State Prison emergency channel (also on 155.475 I.S.P.E.R.N.)
Thanks, Chuck.

A final note: Occasionally, members have indicated that they wish they could have a louder voice in suggesting to manufacturers what they would like to see in equipment for our hobby. How about letting me know? I think we might be able to rectify the situation! See you next month, and keep those cards and lists coming, folks!

Aircraft

Maj. Ron Hammer, Editor

Send private, commercial, firefighting and law enforcement aircraft frequencies of interest in the 108-136 MHz range and frequencies in other bands above 30 MHz associated with airports and aircraft plus questions, articles and tips related to aircraft monitoring to: Major Ron Hammer, 821 Elisa Way, Roseville, CA 95678.

Hello for the third time. Since my first columns have been out for a while now the mail has started picking up. The very day the October issue "hit the streets" (as they say)--before I even received my copy--Pat Stewart (CAAL-023) called from Mt. Eden, CA. Pat is a real-live ATC controller working at the Oakland ARTCC in Fremont, CA. He relieved some anxieties I had over how I was going to keep abreast of current changes in ATC procedures, terminology, etc. Pat did allow that he was not too much into aircraft-band monitoring, however, since he did that all day long at work. (Fun's fun, but...)

Until it gets out of hand I'll try to list all correspondent's names (everyone likes to see their name in print, right?). I do appreciate contributions, but I must note some facts of life. There is quite a long lead time between the writing of this column and its final distribution to the readers--perhaps a couple of months--so great patience is in order waiting to see something come out. As for personal answers, I will get to them, but it may take a while as I am changing to a new, more demanding position with Sacramento County and will have to waste a lot of my time commuting. I must also refer readers to item #6 inside the cover of each RCMA bulletin: "If you require a reply when writing to RCMA headquarters or one of the editors, you MUST ENCLOSE A SELF-ADDRESSED, STAMPED ENVELOPE." While I am not exactly destitute, this is a hobby with me and my time and stamps are not unlimited. For short replys you could enclose a self-addressed "penny" (10¢) postcard.

As most of my predecessors have done before me, I would prefer not to publish lists of ATC frequencies that are already widely published and available in the many sources of such data. For those who have already expended considerable effort in obtaining and typing a printable frequency list, I will include it for publication. Unlisted frequencies such as airline "company" freqs and other hard-to-come-by data is more newsy to most readers. As I stated in the last column, a couple of bucks really should be spent in getting a few useful publications. Most civil airports of any consequence at all will have for sale maps and charts of the local area portraying airways, airports, general-use aviation frequencies, etc. Some restricted-use frequencies are not published as widely and are of interest to list herein, but some facilities such as Sacramento VOR ("SAC") has been transmitting away on 115.2 MHz for over a quarter of a century and it is no big secret!

For those who refuse to or cannot (for some reason) get the various FAA-type government or commercial (Jeppe sen) publications there does not seem to be many frequency lists available. I find Steve Handler's "Radio Communications Guide" to be of limited use for aircraft-band VHF frequencies, but very useful for everything else from submarine frequencies to the entire USAF In-Flight HF net. ($7.95 from Handler Enterprises, Inc., P.O. Box 48, Deerfield, IL 60015) Recently I received a courtesy copy of Tom Kneitel's revised 2nd Edition of "Air Scan" ($5.95 from CRB Research, P. O. Box 56, Commack, NY 11725). It is a 24 page compilation of such data as a Directory of Public, Private and Military Airport/Landing Area Frequencies, a short glossary of terms, a small section of some of the more exotic freqs and the remainder listing all of the ARTCC (Enroute Center) frequencies and remote transmitters plus the ARINC (Aeronautical Radio, Inc.) enroute station frequencies. Having only "scanned" through it briefly I cannot yet offer any judgement as to the accuracy, currency or validity of the data. If all you want is your local airport's control tower freq you do not have to buy Tom's booklet, but if you want a more comprehensive view of what is happening air-comm wise throughout the U. S. of A., then it might be the book for you. (I am sending Tom--who is also on the staff of "SS" magazine--a courtesy copy of our RCMA bulletin.)

Now, obviously, there is a little more to it than just that. What if the airplane you see is an infrequent freighter or a B-52? Pan Am has a 747 training flight that just tools randomly about the Sacramento Valley on occasion on crew-training missions. (Those are probably the only "$75,000 per year 747 pilots". The senior guys are probably getting more like $125,000 per year. Either way, its more than I make, even writing this column.) More about enroute tracking next column. Be sure and have your OAG handy by then for sure.

Now for the mail: Our first contribution is from Duane Peck (MS-09) who appears to be an ATC instructor at the USAF school at Keesler AFB, Biloxi, MS where all USAF controllers (myself included) trained. (Duane, the first time I was at Keesler was 1955, the second time was the summer of 1969. Right, Hurricane Camille blew my apartment down and abruptly terminated that school!) Duane's effort was originally submitted to Chuck Gysi and has been some time in getting into print. Having someone of Duane's qualifications available to help with the column is a real plus.

The August RCMA Newsletter gave a list of the location of the 22 Air Route Traffic Control Centers in the U.S.. It wasn't mentioned however that each of these centers are responsible for airspace far away from the actual center itself. They control this airspace by the use of remoted transmitter/receiver sites many hundreds of miles away from the controllers actual location.

An example of this is Oakland Center. The center is located in Fremont, California but has remoted sites as far away as Reno, Nevada. These sites are not always located near airports but may be on quite distant mountaintops. This gives people nowhere near an airport a chance to get in on the action.

Each of these centers have numerous frequencies for each of its remoted sites. Below is a list of Oakland Center's remoted sites, the VHF frequencies assigned to each site and the towns that the sites are near. The underlined frequencies are those used for high altitude aircraft.

Angel's Camp	132.95 128.15 126.85 124.2 120.6 120.2
Ferndale	134.35 133.75 123.9
Fresno	135.0 133.7 132.8 128.15 126.9 123.8
Palo Alto	135.0 132.65 128.35 126.8
Sonoma	132.2 127.8 121.2
Bradley	134.55 132.8 128.7 126.9
Red Bluff	134.35 132.95 132.2 120.4
Sacramento	127.95
Tonopah NV	132.05 127.3
Fallon NV	134.45 128.8

The following frequencies are assigned to the Los Angeles ARTCC and their site names. These site names are not necessarly where they are located but may just be the name of a hill they are located on or near.

Bakersfield	135.3 134.85 133.05 127.1
Baldwin Hills	132.85 128.2 125.65
Barstow	134.65 133.55 132.5 132.3 127.25 126.35 125.0
Blythe	135.45 134.25
Boron	127.9
Cedar City	135.55 135.25 127.35 124.2
Julian	135.75 133.4 133.2 128.6 125.85 125.65
Los Angeles	134.75 132.5 128.3 128.2 127.4
Nelson	134.65 124.85 124.2
Ontario	125.85
Pahrump	134.7 127.9
Riverside	126.35
Saddle Peak	132.6 126.4 125.8
San Luis Obispo	128.05 124.15
Santa Barbara	135.5 134.4 132.15 128.05
Seligman	134.95 133.2 124.85
Tonopah NV	134.7
Wilson Creek	135.9
Yuma	134.25

I have not seen a copy of Bob Grove's "Federal Frequency Directory" as he has not sent me a free copy, so I don't know how worthwhile it would be for the aircraft-band-only listener. ($16.95 including postage from Grove Enterprises, Route 1, Box 156F, Brasstown, NC 28902) I found Bob's cassette tape "Sounds of Shortwave" ($5.95 + 50¢ post.) to be very well done and worthwhile if you're into HF radio at all. Bob has other neat things concerning monitor listening. Write him for his free catalog.

Rummaging through an old box in my Dad's garage up home in Oregon I ran across the USAF "Supplemental Flight Information Document" dated 1 July 1957 and a "more recent" "Radio Facility Directory" of 8 January 1958. I had squirreled them away back then when I was a fledgling Aviation Cadet pilot trainee. The books seem to have survived the 23 years better than I have. Anyway, they are just chock full of all kinds of late-50's aviation data. So much has changed, yet there are quite a few things that haven't. If anyone wants a copy of the data on some particular place in the U. S., send me a buck and I'll run you off a copy of the chart and tabular data for whereever you want.

Having just broke my home portable typewriter, we now subtly shift to my office machine--which is more readable anyway. For those who have faithfully obtained their free copy of the Official Airline Guide (OAG), let's delve a little more into "flight following" only this time of enroute aircraft. When you see airplanes continually flying overhead on almost the same flight path you can probably assume that they are on some sort of published or radar directed route. From your $1.10 airways map you got at the local airport you can usually determine what route or airway it is. I should note here that these comments would apply more to some sections of the country than to others. If you live in downtown New York City (some people do!) the area may be criss-crossed with a spider-web of airways, departure routes, arrival routes, etc. You may not be able to see the sky anyway, so maybe this particular aspect of aircraft listening should not be your bag. Conversly, there are remote areas of this country where no airways exist within seeing distance and flying machines are seldom seen. For most readers most of the comments will have some applicability, however.

Anyway, once you've figured out what the airway is (the easy part) you must figure out who it is that you see up there and can connect the radio transmission to. Perhaps the best approach to this would be to cite the example of my own case. As I've stated before, J-189, a high-altitude (24,000 ft and above) jet-route runs north-south just east of my abode here in Roseville. Now I am fortunate in that the scheduled air carrier traffic on J-189 runs only between a few possible points--mostly Portland, OR and Seattle, WA with a few Vancouver, BC flights. On the south end is the L. A. area airports and San Diego. There appears to be no other major airline flights between any other points that still use J-189.

So, sitting in my back yard on a clear, sunny (California) day I look up and see a heavy contrail making its way across my sky. Putting down my beverage and picking up my 8 X 50 binoculars I make out a big white DC-10 leading the contrail. Further, even at 30,000 plus altitude I can still just make out a big red "W" on the side. No, Virginia, it is not a Winchester--it is a Western Airlines jumbo headed south. Now, if he's already well into my sector of Oakland's airspace he probably won't be saying anything to this sector controller. I quickly set my scanner to the next sector to the south frequency and am rewarded to hear: "Oakland, Western 714 is with you at 350", or some such. I can't hear Oakland's reply, but I don't need to. If it is very significant the pilot will usually repeat it so I can get it from him. Noting the time of the aircraft's passage I can now impress my friends by pointing up at some later date to a passing dot in the sky and casually saying, "Oh, that's Western 714 out of Vancouver bound for San Diego. Would you like to hear him?" Or, alternatively, be listening to him and casually ask, "Would you like to see him? Just step this way." That fakes people right out that you can do such "magic".

The next insertion comes from Brandt Niemuth (IL-084) Rosemont, IL. This is good, it's the sort of unpublished stuff that's hard to come by except, often, by just many hours of monitoring and compiling.

O'HARE - CHICAGO
Airlines GROUND FREQS

462.65	KAB 2297	Air Wisconsin Inc
460.65	KTE 878	Allegheny Airlines
460.7	KQQ 578	" " now Known as U S Air
460.775		American Airlines
460.8	KSC 890	Braniff
462.55		Butler Aviation (Courtesy Vans)
460.85	KRC 222	Continental
461.25	KKC 584	
460.825	KSI 674	Delta
460.7	KKA 570	Mexicana
460.675		Ozark
460.85		"
464.525		"
460.675	KUK 873	TWA
461.75	KBR 316	TWA
460.725	KAX 258	United
462.825		"
464.325	KCJ 922	United
464.375	KCJ 923	"
464.775	UNKNOWN	

Next came an interesting inquiry from E. P Morsell (CAME-001) Larkspur, CA but it pertains to HF (shortwave) aircraft communications. While I've done a good bit of that in my USAF pilot days, I must refer his future questions to the new Shortwave Utility column editor, Chris Devendorf, as anything under 30,000 KHz is in his bailiwick now. In the meantime, I can recommend the aforementioned "Radio Communications Guide" by Handler or Oliver P. Ferrell's "Confidential Frequency List" 4th ed. available from Grove Enterprises or Gilfer. (Ferrell is the fer in Gilfer.)

Danny Pendleton (GA-025) of College Park, GA writes an inquiry about one of my favorite subjects: Where can you get something to receive the UHF aircraft band (225-390 MHz-AM). I am the wrong one to write to about it, however. The letters and inquiries should be sent directly to the scanner companies such as Electra (Bearcat) and Regency. I'm sure that if the likes of some of these companies persist in their condescending "What-do-you-stupid-little-hobbyists-know-about-what-the-market-wants" type attitude one of the Japanese firms will furnish us with what we are begging for. There is a most interesting article in the 1980 "World Radio TV Handbook" (WRTH) by Lawrence Magne (p. 540) noting how the know-it-all American companies have been overwhelmed by the Japanese in the area of the burgeoning shortwave-listening receiver market in the past couple of years. The austute American companies found that, "...the future for shortwave listening was nil." Now that they have been buried they'll probably (like Detroit) scream "unfair competition".

I even tried to buy Bob Grove's surplus URR-35 UHF receiver, but he had the extremely poor taste to have already sold it before I called about it. His wife told my wife (how's this for some gossip!) that something was going to be done to relieve the UHF problem before too long, so to just hang on. Maybe a converter, maybe a new scanner, I don't know, but the UHF aircraft communications are surely out there to be monitored. Maybe there is government pressure to keep us from the basically military band; I don't know. (It is sort of interesting to note that these same scanner companies tell us not to worry about the gap between 136-144 MHz as there is nothing there to hear, either. Of course, just be-

cause a number of satellites operate in that gap should be of no interest to us non-professionals. I sure hate to be told what I might or might not find interesting! If all I can receive is beeps and squeaks that's for me to decide if it's interesting to listen to.) Anyway, under capitalism, someone will eventually respond if there's $$ s to be had. From what I've seen of marketing research (as a graduate student of business) much good data is misinterpreted--particularly when it gets to the accounting department. I wonder how many of those folks actively, actually monitor aircraft comm.)

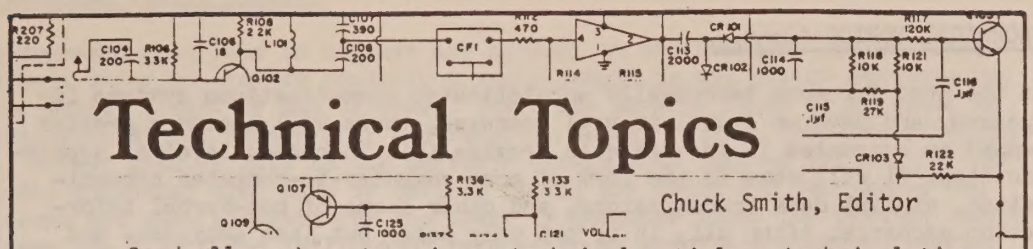
Danny also includes the following Atlanta International airport ground freqs:

ATLANTA INTERNATIONAL AIRPORT
GROUND FREQUENCIES

EASTERN	129.020	In-Range Radio
	130.600	ARINC
	130.625	Ramp Control
	130.825	" "
	131.050	Maintenance
	130.700	In-Range Radio
	460.650	
	460.750	
	460.850	
	485.975	
DELTA	131.450	Ramp Control
	131.650	" "
	131.850	" "
	131.950	Maintenance
	460.700	
REPUBLIC	131.750	Operations
PIEDMONT	129.750	Operations
FLYING TIGER	131.850	
OZARK	130.550	
ARINC	130.450	
	130.600	
	130.950	

Danny is a new member, but already a regular contributor. Tower, approach, departure and center frequencies can all be easily obtained through the aforementioned publications such as: National Oceanic and Atmospheric Administration (NOAA), National Ocean Survey C-44, Riverdale, MD 20840 who has a free catalog of "Aeronautical Charts and Related Publications (and a new price list.) To Ron Page (MI-060) from Southfield, MI, this answers your inquiry as to where to get Detroit area freqs., too. Thanks to James Anderson (TX-038) Hooks, TX for a similar input.

I received an interesting letter from Michael Perlman (IL-044) Evanston, IL who works for the Chicago Sun Times, has access to a neat composing machine and monitors the Chicago area airwaves. Rod Bourne (VA-012) of Arlington, VA sends an extensive listing of his area freqs, too, but I'll just have to hold them until next column due to the length of this one. Thanks, Rod, they'll be coming up. Fred Drost (CT-034) 110 Ridgefield St., Meriden, CT 06450 sends a nice letter. He is wheelchair bound and spends his leisure time between his BC210 and collecting coins of the world. Anyone into either hobby might like to write to Fred to exchange frequencies, coins or just letters about the subjects. This is it for now--be talking to you next year.



Technical Topics

Chuck Smith, Editor

Send all equipment reviews, technical articles, technical tips and questions on such subjects as receivers, antennas, preamps, accessory equipment, repeaters, links, tones, scramblers, non-voice data transmissions or even computer applications for monitoring to: Chuck Smith, 4901 Heil Ave., #3C, Huntington Beach, CA 92649.

Well, as Chuck Gysi pointed out in last month's issue of the Newsletter, this qualifies as my "debut" return as editor of the Technical Topics column, and I look forward with great eagerness to the prospect of serving you in that capacity during the coming year. The only real item of concern to me is that writing the column almost a full two months before it is scheduled for publication can become a little disconcerting; for example, I find it extremely difficult to write about 1981 and all of the great things awaiting us in the future, when I haven't even had the smell of Thanksgiving turkey in my nostrils yet!

Those of you who read my column in the January, 1980 issue of the Newsletter may remember that I was bold enough to make some general predictions about electronics technology and some of the advancements that I expected to see develop over the next ten years. I must admit that when preparing to write this column for January, 1981, that I looked back myself, just to see how badly I may have stuck my foot in my mouth! Fortunately, at least if I haven't been right yet with my predictions, I also haven't yet been wrong. In fact, it was a little bit gratifying for me to look back at those looks in my crystal ball because 12 months after they were written, I think that technology is at least progessing reasonably well in the right direction. My prediction regarding home computers and microprocessor technology is still well within the realm of possibility. New personal computers and improved models of older ones have been being unveiled regularly, and the number of games and toys which incorporate the ubiquitous microprocessor have been even more prominent this Christmas than last year.

My statement that there will be a steadily reduced reliance on communications by wire is also still a safe one. Television networks in several cities have sprung up to provide such services as 24-hour a day news and sports networks, and the television series "Speak Up, America" even made good use of the interactive television polling system known as Qube, which has been set up on an experimental basis in some midwestern cities prior to expanding into other areas. Other countries, such as Great Britain, have been providing television users with access to news round the clock via special networks, and there has been talk among the powers that be about a practical system for electronic mail delivery. I think that developments such as these as inevitable and a natural outgrowth of this new and exciting technology.

Unfortunately, I think that my last prediction, that there will be a steady decline in the amount of "listenable" traffic for scanner users, will also prove to be true, although not for some time to come.

As the need for more technically sophisticated communications systems increases, and have no doubt, it will increase, there will become a greater demand on companies in the field to provide this increased level of sophistication. It will come in the form of more computer-to-computer communication, digital data transmissions, and other forms of non-verbal information exchange. After all, it is not only safer but less ambiguous and confusing to eliminate the middleman, and that means the human operator. The use of language exists solely so that men (and women, of course) can communicate with one another. If you remove the necessity for man to directly communicate via the radio, then naturally you remove the requirement of using a human language. This is what I think will begin to happen, particularly in the areas of public safety where it is so vitally important that radio messages be properly interpreted and acted upon.

I read with great interest the short piece about the Strategic Air Command (SAC) frequencies in the Utilities column of December's Newsletter. This piece was of particular interest to me because I worked at one of these installations back in 1967 when I was a technician in the Air Force. I thought it might be of some interest to you to know something about this radio system, so here are some of the general, non-sensitive details.

The radio system which Chris Devendorf described was known as Project Short Order, and was designed to provide immediate communication with our airborne nuclear forces, no matter where in the world they were located. This capability was guaranteed by using high-powered SSB radio transmitters operating on several frequencies in the HF spectrum simultaneously and from stations located in the four geographical extremes of the continental United States. The Short Order stations at March AFB, Offutt AFB, Westover AFB, and Barksdale AFB are all interconnected by dedicated telephone lines, which can be used by an operator at one station to control and use equipment located at another. The equipment at all of the stations can be seized by the control center in the SAC underground whenever desired for a communications alert, and this is in fact done at regular intervals to insure the readiness of the system. The equipment at each of the four stations is identical with the other three, and consists of a transmitter site and a receiver site located several miles apart and linked together with microwave. Of these sites, the receiver site exerts the most control over the system, and it is here that the actual operators are placed.

The radio system itself is almost automatic, with a minimum of intervention required from the operator under most circumstances. All control over the system is performed using a conventional dial telephone system, but using audio FSK tones instead of dial pulses to designate the number that was dialed. When bringing up a frequency, the operator need only dial a two-digit code which represents that group of equipment. If that collection of equipment is not presently in use, it is brought onto line and loaded with a set of "preset" conditions, such as frequency, antenna, power level, antenna azimuth if applicable, receiver gain, and mode of operation. The operator can change any of these presets if we wishes by dialing the information into the system, thus giving him complete control over the capabilities at his command. When changing frequencies, the transmitter and receiver are both automatically tuned to the new frequency, then the transmitter is automatically keyed at a reduced power level so that the final amplifier can be properly tuned and loaded, all automatically. The transmitters, made by Collins radio, are capable of PEP power outputs in excess of 20,000 watts into the antenna, and the antenna matrix itself which switches the desired antenna to the transmitter uses a "bullet" of metal driven into place between the switch contacts with a blast of

compressed gas. This is because any attempt at switching at conventional speeds under powered-up conditions would result in the switch contacts being welded closed by the RF power! There are several types of antennas in use, both at the transmitter and receiver sites, ranging from omnidirectional arrays with no gain to log periodic arrays with lots of it. The log periodic antennas, also made by Collins radio, are about 250 feet above the ground and have elements for the lower frequencies about 100 feet in length! There are also fixed "billboard" type antennas which are aimed at varying points of the compass, and any one of these antennas may be automatically selected by the system depending on which one is best suited for the frequency in use, desired direction of transmission, and so on. Even now, 13 years after I worked with it, it is probably one of the most effective SSB systems in existence, and is still one of the vital links between our strategic forces on the ground and those in the air.

One reason that I am so glad that HF utility monitoring has become a part of the RCMA's coverage is that it will open up a whole new area for those members who have never done anything other than listen to the VHF and UHF portion of the spectrum with their scanners. While I am by no means trying to reduce the importance of this aspect of monitoring--after all, it was the reason that the RCMA was established in the first place--I think there is a whole new and different world here to be explored by the person truly interested in all aspects of radio communication, and I know it will be a great opportunity for me to venture into subjects not normally involved in strictly the VHF and UHF realms. I personally do a moderate amount of listening on the HF bands with my Panasonic RF-2800 portable, although admittedly most of it is on the international shortwave broadcasting bands. Recently though, I became increasing interested in the HF portion of the spectrum and am now currently on the brink of ordering a shiny new Drake DR-7 receiver to replace the portable for serious listening applications.

I think that becoming interested in the HF spectrum will prove to be a great help for those RCMA members who are interested in eventually getting an amateur radio license. After all, it's pretty rare to hear Morse code on our scanners these days! Everything seems to change as we move down below 30 MHz, everything from the best type of antenna to signal propagation. In fact, where most receivers for VHF and UHF are sadly lacking in performance without a low-noise external preamp, down below 30 MHz even the most inexpensive receiver usually has adequate sensitivity. This is due primarily to the fact that below 30 MHz the primary sources of noise are atomospheric and man-made, while above 30 MHz these sources taper off and the primary offender becomes the receiver itself. I hope to be able to cover subjects like these with compreshensive articles in the future, but for the time being I would rather busy myself with answering questions from you members out there. So get busy and send in those questions and articles; after all, the sooner you do the sooner you get to stop hearing me ad lib all of the time, and that's bound to be a great incentive!! In upcoming issues of the Newsletter I hope to cover such HF-related topics as single-sideband, antennas, shortwave propagation, even methods for tuning those rare and elusive stations. In the meantime, as always I am open for questions from anyone about anything related to monitoring. I would also like to solicit comments from those of you who have recently bought one of the newer scanners; do you like it, do you hate it, and why? Any hint, kink, or other experience which you have had will prove both interesting and helpful to the general membership, and you will have the satisfaction of knowing that you personally contributed to the greatness of the RCMA. I think it's important that all of you feel that way, because that's what makes us the great club we are and separates us from the commercially or-

ienting clubs that were created to promote products, not hobbies. Now I'm not naming names or throwing mud, so I don't expect to hear any screams of protest from anyone, if you know what I mean.

Well, I think I've pretty much set the tone for my new year: it's one of hope and optimism for our club and the great hobby that it represents. I think the coming year will be a great one for us all, and with your help and assistance I hope to hold up my end with the Technical Topics column. For now, good luck, good listening, and I'll be seeing you next month.

73.....Chuck

under 30 MHz

Chris Devendorf, Editor

Shortwave Utility

This column is for reporting RTTY, CW, MCW, SSB, AM and FAX reception reports, explanatory notes, articles and questions relating to frequencies below 30 MHz. Services covered in this column will be military, civilian aeronautical, coastal/maritime, SSB broadcast feeders, government, beacons, weather, voice markers, time/frequency stations, etc.--essentially everything except broadcast, CB and amateur radio. Send to: Chris Devendorf, 29261 Buckhaven, Laguna Niguel, CA 92677. If you need a Shortwave Utility report form, please enclose a SASE with your request.

Ronald Pokatiloff (IL-083) writes: I would like to list for anyone just getting started, some interesting frequencies from my past monitoring.

USAF	6750 MacDill (night)
	8989 MacDill, McClellan
	13244 Mac Dill (day)
RCAF Canada	11233
SAC	4725 6761 9027 11243 13241 15041 17975
NAVY	6697 6723 11267
USCG AIR	8980 8984
USCG	4428.7 6506.4 8765.4 13113.2 (shore)
	4134.3 6200 8241.5 12342.4 (ship)
USSR air traffic control	13220
Long Distance Operational Control	10093 13356 17941 10065 23285 11318
Commercial Air	5610 8945 13288 8889 5673 5638 8854 8910 5624 (Atlantic)
	10017 8959 11367 6540 (Caribbean)
	5603 13336 8847 13296 (Pacific)
High Seas	8722/8198.1 (WOM)
	8740.6/8216.7 (WOO)
	13107/12336.2 (WOO)
	13100.8/12330 (KMI, Portishead, Moscow)
NORAD	14894
CAPE RADIO	20198.3 LSB
LONDON, Fixed Telecom	25465 25493 (days)
ANDREWS AFB & VIPs	9007 9018 11236 11249 13215 18490

Robert Trivalos (WI-) writes: On a trip to Chicago on Hwy 41 South, about 15 miles south of the Wisconsin border, a sign indicated to motorists to tune in 1610 khz for emergency traffic radio, but all I heard was how to form a car pool. I am curious if there is another purpose for this broadcast, and if there is any

other type of info broadcasted on this channel. The only ID that I heard was, "This is station 8441 on the Illinois state....", at this point it was list due to static and then the signal was gone north of Gurnee, Illinois. The trip was taken on October 25, and I arrived in the area of the transmission around 6:45 AM.

INFO

US NAVY HICOM NETS

The navy uses several frequencies in the HF bands for their "High Command Worldwide Voice Network (HICOM). These frequencies are guarded by all Navy Communication Stations, and by most US Navy ships. The callsigns used on these nets are of the type that changes daily. The Atlantic Fleet primarily uses 3-digit calls, and the Pacific Fleet uses 2-digit calls. Both types can be composed of either letters or letters and numbers. The traffic most frequently heard on these channels will be radio checks. However, some occasional coded messages and teletype coordination traffic will be heard. All frequencies are operated in the USB mode. Units in the Atlantic can be heard most any time on 6697 or 11267. Pacific Fleet units operate on 2 frequencies at a time depending on the current propagation conditions. Look for them on 4707, 5722, 6720, 9032, 11191, 15054, 18015 or 23315. (Low frequencies at night, higher ones in the daytime). Other frequencies will also be used on occasion, and some voice frequencies in use are not HICOM nets but other types of activity.

US AIR FORCE

Here are a few USAF voice frequencies that can be heard with a little patience.

9023 USB	NORAD activity including E-3 (AWACS) aircraft
15091 USB	Tactical Air Command activity with RAYMOND 27 (Mountain Home AFB) and RAYMOND 28 (Bergstrom AFB)
10780 USB	USAF Eastern Test Range "CAPE RADIO" primary frequency
6715 USB	"MOFFETT RESCUE" (also "MARCH RESCUE" on LSB)

Coastal Station WSL is operated by ITT World Communications. Its HF transmitters are located at Brentwood, L.I., New York and its MF transmitters are located at Amagansett, L.I., New York. All all remotely controlled from an operations center located at Southampton, L.I., New York. CW communications frequencies are: 418, 476, 500 for the MF band and 4342.6, 6416, 8514, 8658, 12660, 12997.5, 13024.9, 16997.6, 17021.6 and 22485.

A traffic list of ships that WSL holds traffic for is sent at 0150, 0550, 0750, 1150, 1350, 1550, 1950, 2150 and 2350 GMT. Weather reports are sent at 0500, 1100, 1350, 1700, 2150 and 2300 GMT. An American Radio Association Press report is sent every Sunday at 1818 GMT.

PUBLICATIONS

A new edition of the "Worldwide Marine Weather Broadcasts" is available from the Government Printing Office. It covers weather broadcasts is CW, voice, FAX and RTTY and is very interesting to Utility listeners. Write to the US Government Printing Office, Washington, DC 20402 for information.

INTERCEPTS

Contributor		Primary Receiver	RTTY Unit
Bill Blomgren	IL-020	Drake SSR-1	Info Tech 75
Mike Chabak	AZ-023	Halicrafters HQ-180	

Chris Devendorf	CA-OR-050	McKay Dymek DR-33C	Info Tech M-200E
Fred Osterman	KY-	Drake R4B	??
Ron Pokatiloff	IL-083	Sony ICF-2001	

Voice

2182	SSB	10-9	0557	MONTREAL COAST GUARD, Canada	RP
2670	SSB	10-8	0557	COMSTA NEW ORLEANS w/marine info bcst	RP
3071	LSB	10-21	0250	ANDREWS, Maryland wkg AIR FORCE 1	BB
	LSB	10-23	0040	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
4721	USB	10-21	0245	ANDREWS, Maryland wkg AIR FORCE 2, radio check	BB
5638	SSB	10-8	0547	GANDER, Canada (NAT-C net)	RP
5696	USB	11-1	0434	BARB AIR (Barbers Pt, Hawaii) wkg CG 1420	MC
5700	USB	10-14	0200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	USB	10-16	0100	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
6506.4	SSB	10-17	0600	COMSTA KODIAK, Alaska (USCG)	RP
	USB	10-24	0432	CGC POLAR STAR wkg SAN FRANCISCO	MC
6617	AME	10-21	0510	NAIROBI, Kenya (VOLMET)	RP
6683	LSB	10-6	2200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-10	0020	ANDREWS, Maryland wkg AIR FORCE 1	BB
	LSB	10-14	0200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-16	0100	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	USB	10-21	0250	ANDREWS, Maryland wkg AIR FORCE 1	BB
	LSB	10-22	2205	ANDREWS, Maryland wkg SAM 26000	BB
6715	LSB	10-13	2200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-16	0100	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
6723	USB	10-30	0243	PANTHER (USS Kitty Hawk) wkg BEAVER (NAS North Is)	MC
6738	USB	10-17	0300	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
6756	USB	10-21	0115	ANDREWS, Maryland wkg AIR FORCE 2 (p/p to CROWN)	BB
6980	LSB	2-13	0240	Illegal truckers ID'ing as units 1 thru 8	BB
7342	AM	10-20	0800	NUMBERS STATION-SS YL 5-digit (Att 472 75)	CD
7441	USB	10-28	0755	ST PAUL LORAN, Alaska wkg PORT CLARENCE LORAN	CD
7527	AM	10-20	0714	NUMBERS STATION-SS YL 5-digit (Att 198 40)	CD
7554	USB	10-28	0816	Dakar, Senegal, YL EE/FF voice marker	CD
8793.3	SSB	10-17	0625	St Lys Radio, France with FF tfc	RP
8808.8	SSB	10-17	0615	St Lys Radio, France	RP
8868	AM	10-30	1346	JAKARTA, Indonesia wkg GARUDA 907	MC
8773	USB	10-31	0424	SPARTAN (USS Lexington) wkg IMITATION 2 with p/p	MC
8989	SSB	10-14	0543	AIR FORCE RESCUE 1456 wkg MC CLELLAN	RP
	USB	10-25	0524	MAC DILL, Florida wkg CG RESCUE 1339 (HC-130B)	RP
8993	USB	10-28	1358	CLARK, Philippines wkg NY354	MC
8997	SSB	10-1	0416	G60 (USN) wkg "Reno"	RP
9007	LSB	10-9	0040	ANDREWS, Maryland wkg SAM 12488, p/p to Tinker Ops	BB
	LSB	10-21	2140	ANDREWS, Maryland wkg AIR FORCE 1	BB
	USB	10-21	0100	ANDREWS, Maryland wkg AIR FORCE 2, radio check	BB
	LSB	10-23	0005	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-25	1728	ANDREWS, Maryland wkg AIR FORCE 1, p/p to CROWN	RP
9018	USB	10-21	0105	ANDREWS, Maryland wkg AIR FORCE 2, radio check	BB
10523.6	SSB	10-7	1042	IWO JIMA LORAN wkg BARRIGADA LORAN	FO
	SSB	10-7	1201	YAP LORAN wkg MARCUS ISLAND LORAN	FO
	USB	10-28	1309	YAP LORAN wkg CG GUAM RADIO	MC
11182	USB	10-8	0000	SCOTT, Illinois wkg DATUM 19 with p/p	BB
11200	SSB	10-18	0637	WEST DRAYTON, UK with aero weather	RP
11215	USB	10-26	0750	LIMA, Peru wkg BRANIF 515	RP
11226	LSB	10-13	2100	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
11249	LSB	10-6	2200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	USB	10-16	0100	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-17	0300	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	USB	10-30	1416	ANDERSON, Guam wkg SWAN 37	MC
11267	SSB	10-21	0447	ODD wkg 8DD (USN HICOM net)	RP
11318	SSB	10-21	0443	Iberia Airlines Long Distance Operational Control	RP
11552	SSB	10-12	0328	SOUTH POLE wkg MC MURDO, meteo info	FO
11755	USB	10-28	0046	KING 81 wkg KING 83 (USAF HC-130's)	CD
13131.8	SSB	10-17	0630	Genoa Radio, Italy, EE voice marker	RP
13159.7	SSB	10-17	0633	Gen Pacheco Radio, Argentina, YL-EE/OM-SS vm	RP
13201	USB	10-1	2145	BOOKSHELF wkg APACHE (USAF)	BB

SHORTWAVE UTILITY CONTINUED

13204	USB	3-14	2200	CAPE RADIO, Florida wkg GABBY	BB
13215	LSB	10-6	2200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
	LSB	10-14	0200	ANDREWS, Maryland wkg AIR FORCE 1 and SAM 26000	BB
13221	USB	10-30	1356	ANDERSON, Guam wkg SWAN 21	MC
13247	USB	10-11	1650	ANDREWS, Maryland wkg SPAR 78	BB
13288	SSB	10-9	1710	NEW YORK, New York (NAT-B,C net)	RP
13344	AME	10-21	0455	ANCHORAGE RADIO, Alaska, VOLMET bcst	RP
14415	SSB	9-24	0356	DAVIS BASE, Antarctica, OM EE voice marker	FO
14902	USB	10-3	0145	POM POM wkg MOTOR TREND	BB
15048	USB	10-22	2250	ANDREWS, Maryland wkg SAM 26000 and 27000	BB
17329	AME	10-17	1630	Portishead Radio, UK	RP
17975	SSB	10-6	1853	BATTERY with coded bcst (USAF-SAC)	RP
20558	SSB		1817	Paris, France FF/EE voice marker	RP
20608	SSB	10-9	1744	KCW21 Smithsonian Cambridge, MA wkg OCK25	RP
20936	SSB		1700	USN-MARS Phone patch net	RP
23285	SSB	10-12	1544	Schwarzenburg, Switzerland, Telecom tfc	RP
23315	SSB	9-30	2210	MO wkg G5, USN Hicom net	RP
25444	USB	9-28	1748	Lyngby Radio, Denmark, telecom tfc	RP
28027	LSB	10-25	1915	ANDREWS, Maryland wkg AIR FORCE 2, p/p to CROWN	RP

Morse

426	CW	10-28	0712	KPH, RCA San Francisco, traffic list	CD
5301a	CW	10-30	1220	"F" and "K" Beacons mixing together	MC
5683a	CW	10-19	1205	"K" Beacon, repeats every 5 seconds	MC
7546a	CW	10-30	1304	4EB (Unk location) Marker	MC
10646	CW	11-1	1206	"F" Beacon, repeats every 2 seconds	MC
13100	CW	10-28	2324	TIM Limon, Costa Rica, CQ marker	CD
13215.5	CW	10-4	0123	FUX French Navy Reunion Is., V marker	CD
13385	CW	10-12	0030	RUZU Molodezhnaya, Antarctica clg RKIS	FO

RTTY

6330	100/850R	10-8	0100	CFH Canadian Military Halifax, Fleet weather	BB
8130	100/850R	10-7		Miami, Florida, US synoptic wx summary at H+20	BB
10461	100/425	9-24	0306	4UZ United Nations Geneva, Diplo tfc	FO
11070	66/425R	10-21	0656	Prensa Latina, SS news	CD
12499a	66/170R	10-12	2216	UNYR "Grigorii Atchkanov" RY test	FO
14526	100/425R	10-28	2341	VOA, unk location, RY test	CD
14725	66/170R	10-28	2346	TNL ASECNA Brazzaville, Congo, RY test	CD
16640	66/425R	10-25	0017	EMBACUBA Havana w/ 5 digit groups to Nigeria	CD
19960.5	66/	10-12	1710	9HA Luga, Malta, RY test	FO
20520	66/850	10-20	2102	LOL Navy Buenos Aires, Argentina clg PWZ	CD
23770	100/850R	10-27	2143	"American Republic Wireless File" EE news	CD

Do any of you have a particular interest of expertise in any field of HF utility? Do you have full information on any stations or systems? If you fit any of these categories, please write up an article or short paragraph and send it along to share with the readers. We all benefit from the information and experience that others are willing to share with us. See you next month....

contact/info wanted

The purpose of this column is twofold: to help members to contact other members, and/or to help members obtain information directly from other members on various subjects related to 2-way communications monitoring. If it's your desire to converse, meet, or correspond with other members by telephone, letter, or cassette tape in a certain geographic area, or with members who have similar listening interests, this is the place to say so. Those who respond will do so directly, so be sure to give your phone number, the best time to call, and/or your address.

Write to: John W. Darr, P. O. Box 1652, Cheyenne, WY 82001

HAPPY NEW YEAR from your equally-new contact/info wanted editor! By way of introduction, let me tell you that I'm an Air Force retiree, a transplanted Iowan, and an ardent monitoring fan. My wife scans with a BC-101, while I use a Wards 845, which I believe to be nothing but a BC-220 in a slightly altered package. In this country, we find monitoring to be more than fun -- it's essential, if one is to stay current with all that's going on. What with frequent and severe blizzards during this time of year, with resultant road-closings, etc., the scanners provide important information otherwise unobtainable. At least, unobtainable in a timely manner. So we consider our scanners to be essential elements of survival gear!

I'll conclude this one-time bit of editorializing (isn't that what editors do?) with this promise to the membership: I'll do my very best to organize and present your requests in a clear, concise, readable, hopefully interesting, and accurate manner. Obviously, this job requires little in the way of intelligence or technical savvy! But it does require what I've promised, and that I will deliver. Here goes!

DALLAS-FT WORTH INFO Tennessee member, soon to be Texas member, needs frequencies, codes, and other informations for Dallas-Ft Worth area. Wants all services -- rail, business, police, fire, air, government, etc. [10-5-80]

LARRY VAN HORN (TN-Ø14), 7870 A Corsair, Millington, TN 38053

FLORIDA POLICE TAPES New member wishes to exchange cassette tapes of police agencies. Wants Dade, Broward, and St. Lucie SO's, all in Florida. Also desires information on any repeaters in the state on 154.950 MHz (out). In addition, needs codes for Manatee SO, Bradenton PD, and C & R Ambulance. [10-19-80]

SCOTT MILTNER (FL-Ø69), 301 87th Ave, St Petersburg Beach, FL 33706

MARYLAND (Montgomery County) CODES New member wants updated Montgomery County, Maryland, police codes -- he has them from 1974. Also looking for "10-codes" for U. S. Park Police. [10-19-80]

DAVID DOERNBERG (MD-Ø34), 24 North Summit Drive #202, Gaithersburg, MD 20760

NEW YORK CITY FREQUENCIES New member wishes to exchange public safety and federal law enforcement frequencies for the New York City area. [10-21-80]

JAY ROSEN (NY-???), 1740 East 4th Street, Brooklyn, NY 11223

FEDERAL PHILADELPHIA FREQUENCIES Philadelphia area members wants to exchange verified Federal frequencies for the Philadelphia area. [10-29-80]

GARY ADLER (PA-Ø48), 135 Greenwood Drive, Willow Grove, PA 19090

OHIO UNIT NUMBERING LISTS Ohio member wants to obtain unit numbering lists for the following counties, all in Ohio: Defiance, Fulton, Henry, Logan, Lucas, Putnam, Sandusky, and Williams. [10-28-80]

DAVID SPENGLER (OH-Ø76), P O Box 619, Bowling Green, OH 43402

DE-PA-MD FEDERAL FREQUENCIES and INFO New Delaware member wants to trade Federal frequencies for Delaware, Pennsylvania, and Maryland. He'd also like an answer to this question: Can anyone tell me if it's better to buy a receiver such as the new Radio Shack 2002, or use a converter with a 250? If using a converter, will I be able to use 'search' for the 400-420 band, or will I have to manually punch in the frequency?

TOM TOPPIN (DE-???), 11 LaSalle Ave, New Castle, DE 19720

INTERFERENCE ID Now I have a question! Is there someone out there who can ID a vexing interference on 154.8 MHz? It sounds machine-generated, completely drowning out the Cheyenne PD. The PD doesn't hear it, but at least 3 of we monitors do. I can provide copy of it on reel-to-reel or cassette. HELP! [11-5-80]

JOHN W. DARR (WY-ØØ4), P O Box 1652, Cheyenne, WY 82001

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Business, Etc.

Chuck Gysi, Editor

This column is for reporting frequency and radio system information for the following varied services: business, forest products, petroleum industry, special industrial, manufacturers, news media (behind-the-scenes radio, TV & newspaper), motion picture industry, security (private patrol, detective agencies, campus security & police, amusement park & stadium security, shopping center & mall security, plant/business/ hotel security, etc.), General Mobile Radio Service (GMRS), mobile phone/RCC & paging, trucking firms, bus lines, taxi cabs, tow trucks, utility companies (private & municipal water, power, electric, gas, telephone, etc.), and all school & college related frequencies. Send information and questions pertaining to the radio services covered in this column to: Chuck Gysi, P.O. Box 216, Willow Grove, PA 19090.

The contributions to this column have been coming in slowly but surely. I think I have received more contributions in the last month than any other month this past year. If you have any business-related frequencies to pass along, send them in. Now, on with the show.

News Media/Film

DENVER, COLORADO, AREA NEWS MEDIA

From George Hoggatt (CO-007):

STATION	BASE	MOBILE	REMARKS
KHOW	450.050	455.050	traffic reports and reporters
KOA radio & TV (ch.4)	450.1125	455.1125	Ch. 1
	450.150	455.150	Ch. 3 mostly radio - traffic reports
	450.1875	455.1875	Ch. 4
KIMN radio	450.250	455.250	traffic reports - reporters
KBTV TV channel 9	450.4125	455.4125	mini camera live reports
	450.6125	455.6125	reporters
KLAK radio	450.350	455.350	
KMGH TV channel 7	450.5125	455.5125	Ch. 1 repeater, Ch. 2 simplex
	450.550	455.550	engineering
	450.5875	455.5875	Ch. 3 repeater, Ch. 4 simplex
KLZ radio	450.650	455.650	traffic reports - reporters

All of the above are repeater operation except as noted. Those having traffic reports have a unit from the Rocky Mountain Motorists (AAA) and Denver Police Department units on their frequencies to aid with traffic and some reporting.

MORE ON THE SHADOW

From Chuck Gysi (PA-005):

A couple of folks in the New York City area have been wondering what Shadow Traffic Network is up to lately since they moved off their GMRS 462.55 frequency.

Shadow now operates on 452.975. In addition, their "air-west" copter that flies over North Jersey suburbs, can be heard on 450.925, instead of 452.975. The copter calls Shadow's base (very low power) on 450.925 to feed info on North Jersey. The copter may be the same one that operates on 450.65 for WBRW in Bridgewater, N.J., but we haven't been able to confirm as of deadline.

Also, overheard on 452.975, was mention of "air-east" operating on 122.90 on the aero band. Might be worth checking out.

Also noteworthy, the base station operator for Shadow's Metro New York operations is none other than John Kane, formerly of the ARCO Go-Patrol in Philadelphia. Thought the voice sounded familiar!

TOP SECRET NEWS CHANNELS

From Walt Baranger (CA-OR-129):

The following 25/26 MHz frequencies are used by KNBC-TV and NBC network news in the Los Angeles area for passing sensitive information. All the frequencies are FM; an AM receiver is useless. These channels are used since most scanners won't go that low. (Editor's note: My Regency Touch 16K dips that low!)

25.87	F-1	
26.15	F-2	These channels are used for engineering and
26.25	F-3	"private" for ENG crews.
26.35	F-4	

Also, 161.76 is used as news primary by KNBC-TV and NBC in Los Angeles.

An interesting note--Even though NBC is owned by RCA, they use General Electric radios. "Better than Motorola or RCA," says an engineer.

From ROBERT STOFFEL (CA-OR-026): KLAC radio, Los Angeles, uses 161.73 and 161.76 for remote broadcasts.

From TONY LOVING (NJ-005): In Metro New York, Broadcast News Service is licensed on 463.400 MHz.

NEXT MONTH: Northeastern Pennsylvania news media frequencies!

Business

SOME METRO NEW YORK CABLE TV FIRMS

From Tony Loving (NJ-005):

35.980	CINE TV--Brooklyn, NY
461.375	U.S. Cablevision--Beacon, NY
464.350	Teleprompter Cable--Mount Vernon, NY and New York City
471.9375	UA Columbia Cablevision of NJ--Oakland and West Paterson, NJ
851.1875	UA Columbia Cablevision of Westchester--Alpine, NJ
851.4125	UA Columbia Cablevision of NJ--Oakland and West Paterson, NJ
852.0875	Cablevision of NJ--Fort Lee, NJ

MORE METRO NEW YORK RADIO REPAIR SHOPS

From Tony Loving (NJ-005):

35.920	Belmont Communications--Emerson, NJ
461.300	Federal Communications--West Orange, NJ
463.500	Mountain Communications--West Orange, NJ
463.700	Astro Antenna Corp--West Orange, NJ
463.875	Bingham Communications--West Orange, NJ
464.800	Forbes Communications--West Orange, NJ
853.6625	Mobile Communications--West Orange, NJ
853.6375	ESC Specialty Electronics--Fort Lee, NJ
462.075	Mobile Communications--Fort Lee, NJ
461.375	Coastwide Communications--West Orange, NJ
461.475	Tra-Mar Electronics--West New York, NJ
463.775	Communications Systems Eng--Beacon, NY

462.050 Comtran Communications--New York City
461.075 Syntonic Technology Communications--New York City
854.4375 Knapp Radio--Verona, NJ
463.700 Motorola C&E--West Orange, NJ
463.900 Motorola C&E--New York City
472.1375 Motorola C&E--West Orange, NJ and Long Island, NY
472.1875 Motorola C&E--West Orange, NJ and New York City and Long Island

Motor Carrier

Be sure to see the Communications Profile column elsewhere in this newsletter for details on the Santa Clara County Transit District in California.

Mobile Phone/RCC

Nothing to report on the Mobile Phone/RCC front this month. Have you heard of any interesting uses or details? If, so send 'em on in!

Utility

PART X--LOS ANGELES CITY WATER AND POWER SYSTEM

Blue Frequency Operations

The blue frequency, 48.18 MHz, is assigned to Los Angeles area water operations. During normal working hours, Monday through Friday, San Fernando Valley operations use the silver frequency (47.96 MHz).

Mobile units with blue frequency capability may communicate with the following base stations: "Radio" (radio telegraph office--L.A.), "Water" (water trouble--Ducommon), "Western" (water trouble, western district), "Harbor" (water trouble, San Pedro), "Van Norman" (Gatehouse, Van Norman Dam) and "GOB" (water operating, general office building).

If difficulty is encountered communicating with the above listed stations, "radio" is to be called for assistance.

Base station operators normally will make use of the following transmitters when communicating on the blue frequency: Lookout Mountain (KME 488), Scattergood (KLR 960), San Pedro (KDN 373), Mount Washington (KMG 734), Van Norman Dam (KTU 841) and Harbor General Station (WXH 376).

Base station operators other than Lookout Mountain, must identify the transmitter at the end of each series of transmissions by transmitting the assigned FCC call sign. The Lookout Mountain transmitter will be identified by the operator on duty at the Los Angeles radio telegraph office.

Security

ATLANTIC CITY CASINO UPDATE

From Chuck Gysi (PA-005):

As Atlantic City, N.J., becomes known as a gambling center in its own right, more and more radio traffic will deal with casino activity. So far, all traffic is on the UHF band, but as more and more casinos open, alternatives may be sought to avoid overcrowding. At times, the casino UHF frequencies can be copied in the Philadelphia area in the evening. Mobile, the frequencies can be copied up to 20 miles out of Atlantic City. There's lots of fun listening here between security and personnel keeping tabs of pay-outs. If you know of any other frequencies in use by A.C. casinos, please let me know. As each new casino opens, we have to check them out!

New Jersey Casino Control Commission
460.175 WXK 657 Repeater, 110 mobiles
460.250 WXK 657 Repeater, five mobiles, 150 handhelds
465.175 WXK 657 110 mobiles (input to 460.175)
465.250 WXK 657 five mobiles, 150 handhelds (input to 460.250)

Resorts International Hotel-Casino
464.675 KKZ 780 Security
464.275 WZC 301 Paging
465.000 WXK 428 Paging (licensed to Intertel)
Caesar's Boardwalk Regency Hotel-Casino
461.925 Paging
461.950 Security
Bally's Park Place Hotel-Casino
463.600 WZW 208 Paging and security
464.100 WZW 207 Security
462.800 Paging (reported by Steve Malone—NJ-049)
The Brighton (Greate Bay Hotel Corp.)
463.325 Security (reported by John Massey—NJ-002)
Golden Nugget Casino (not opened yet)
464.125 Security (reported by Steve Malone--NJ-049)
Ramada Development Co. (casino under construction)
464.825 WXD 645 (not verified)
Unknowns monitored--need help IDing
464.750 Hotel security
461.100 Hotel security
154.540 Taxis or trams

School

MIAMI AREA COLLEGES

From RCMA Miami Group:

151.715 Miami-Dade Community College, South Campus security
153.995 Florida Atlantic University
155.025 Broward Community College security
461.050 University of Miami campus police
464.325 Miami-Dade Community College, North Campus security
464.875 Miami-Dade Community College, Downtown Campus security
470.9125 Ferida International University campus police

Freak Freqs

OREGON SEED COUNCIL SYSTEM

From Kevin Slater (OR-010):

The Oregon Seed Council, a consortium of grass seed growers in the Willamette Valley operates a radio system primarily during the summer and early autumn months.

Two repeaters are used on 451.825 MHz. One is on Vineyard Mountain north of Corvallis (KFW 552) and is used for the southern Willamette Valley. The other is in West Salem (KFW 551) and is used for the northern valley.

Control links exist from the Seed Council headquarters in Salem, various fire dispatch centers in the valley and the larger grass seed growers.

The "Seed Council Network" has tone squelch control links to the repeaters from the following cities: Albany, Brownsville, Corvallis, Eugene, Halsey, Harrisburg, Irving, Jefferson, Junction City, Lebanon, Monmouth, Monroe, Portland, Silverton, Stayton, Sublimity, Tangent, Woodburn and Salem.

Some of the things to be heard are detailed weather bulletins that help determine whether field burning (after the grass seed is harvested) will be allowed, decisions on opening or closing of burning previsions in various areas, "airwatch" reports on smoke dispersion from field fires and other traffic in which decisions are made to allow or prohibit field fires.

From ROBERT STOFFEL (CA-OR-026): The country group "The Oak Ridge Boys" uses two-way radio when on tour and at home. Based in Nashville, they are on 464.225 MHz with a repeater. When on tour,

they use 464.225 simplex or 464.2375. Buses, vehicles and key operations people have radios.

From TONY LOVING (NJ-005): Unification Church is authorized on 463.300 MHz in Beacon, NY and New York City. (Editor's note: That's Rev. Moon's "Moonies" in case you didn't recognize it!)

Miscellany

P.O. Box 216
Willow Grove, PA 19090

HOW TO ORDER FCC MICROFICHE FILES

By James Zuchelli (CA-ST-001)

The FCC master file of radio licensees (business, common carrier, broadcast, industrial, public safety, etc.) is available to the public on microfiche cards from the National Technical Information Service (NTIS), a division of the U.S. Department of Commerce.

Microfiche are microfilm on 6-by-4-inch sheets, each containing approximately 270 pages of information. To read the microfiche, you need a microfiche reader which takes sheet film and has a 32x or 48x lens (the latter being better).

A roll-film microfilm viewer will not work, nor will a photographic enlarger or magnifying glass. You need a microfiche viewer, otherwise the files are useless. Many schools, colleges, libraries and businesses have them, or they can be purchased for $210 or $95 for a handheld version.

The NTIS has a number of FCC license files for sale, however, only three of them are of direct use to the scanner listener.

Frequency Master File	Covers all radio licensees in all services in the United States from 1 kHz to 12,000 MHz+. 323 sheets. $161.50 Ordering # NTISUB/E/193-001
Frequency Auxiliary-Call Sign	Lists call signs in order and gives partial data on licensees. Mainly a cross-reference file. 23 sheets. $11.50. Ordering # NTISUB/E/222-001
Frequency Auxiliary-Frequency By State	Lists many, but not all licensees by transmitter location (city). Listed by each city in each state in alphabetical order. Very good for finding local stations. 24 sheets. $12.50 Ordering # NTISUB/E/223-001

The master file (193-001) lists every licensed radio transmitter in the country except federal government and military (IRAC) information. Stations are listed by frequency beginning with below 1 kHz and going up to 21,000 MHz+.

Each frequency is given in order and every transmitter on that frequency in each state and U.S. possession is listed in alphabetical order by town. Also, the licensee's address, transmitter power, area of coverage, latitude and longitude, call signs, control points, etc. are listed. The file contains approximately 86,940 pages of information.

The frequency auxiliary-call sign (222-001) lists all call signs in order. You can check an unknown station's call sign and find out what radio service it is licensed in, the licensee's name and transmitter location. The file does not contain complete file data, but is useful as a cross-reference.

The frequency auxiliary-transmitter by state (223-001) is the best file to have at times. It lists most communities in each state and lists many (but not all) transmitters in that community. For example, Modesto, CA, population 103,000, shows 477 stations, 45 of which are 800-MHz. In nearby Riverbank, CA, population 4,500, 24 stations are shown, 4 of which are 800-MHz. If you can't afford the master file or don't want to spend a lot of time tracking down stations, this may be the one for you. It also shows FM stations, airports, etc.

Before ordering, you may want to write to NTIS and request a copy of their "FCC microfiche price schedule." This lists all radio frequency files and prices and includes citizens' band, amateur, microwave, television, etc.

To order, print or type your order information. The full ordering number must be given (e.g. NTISUB/E/193-001). Include the price of each file and total the prices. Shipping is free by UPS or mail. If you are ordering from outside the United States, write first for information. It is best to send a money order or cashier's check, although they will accept checks. Businesses may send purchase orders.

Send your order to:

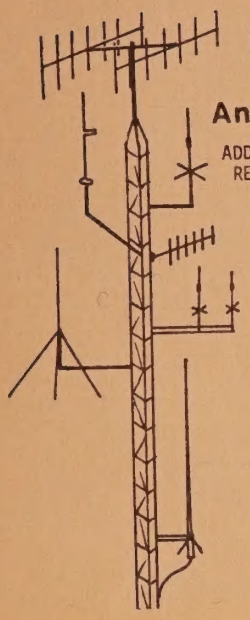
U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

Your order should arrive in a week, two or three. Now the bad news--the NTIS is a government agency and they can screw up royally. If they get your order mixed up, write them a letter and include your NTIS control number (on the pink card that comes with your order).

You may call their customer service number (703) 487-4660, but if the person who handles your state isn't in, they will not be able to help you until that person comes in. Also, the people you talk to on the phone often don't know what they are talking about. I spent 15 minutes trying to explain what microfiche is to one person. On my order of master file, 50 sheets had fuzzy edges. It took a long time to get them replaced, but when they did, NTIS sent me a whole new set (323 sheets) and said to keep the old set.

Important--if you write to NTIS, type DO NOT DUPLICATE on your letter, or they may send you a new order and bill you for it.

The ordering number is important. The letter between the slants /E/, designates which issue they send. They are updated every three months. The 001 designates microfiche. If you left off the 001, I don't know what they would send you.



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YOUR LABEL

Your label is your membership card in the R.C.M.A. Unlike a lot of radio clubs the R.C.M.A. does not have a bunch of "gimmics" to offer you or a chance at a "good" deal. What we have is the newsletter.

Your label on the newsletter indicates you have full status as an R.C.M.A. member. It is by the newsletter you will have to evaluate the club. There are no other badges, decals, bumper stickers etc .... There are several arguments we should have these items, but we have thus far consentrated our efforts on the newsletter. The newsletter is only as good as the contributions of the members. The quality depends on you and when you send information to an editor please include your ID number found on the top of the label.

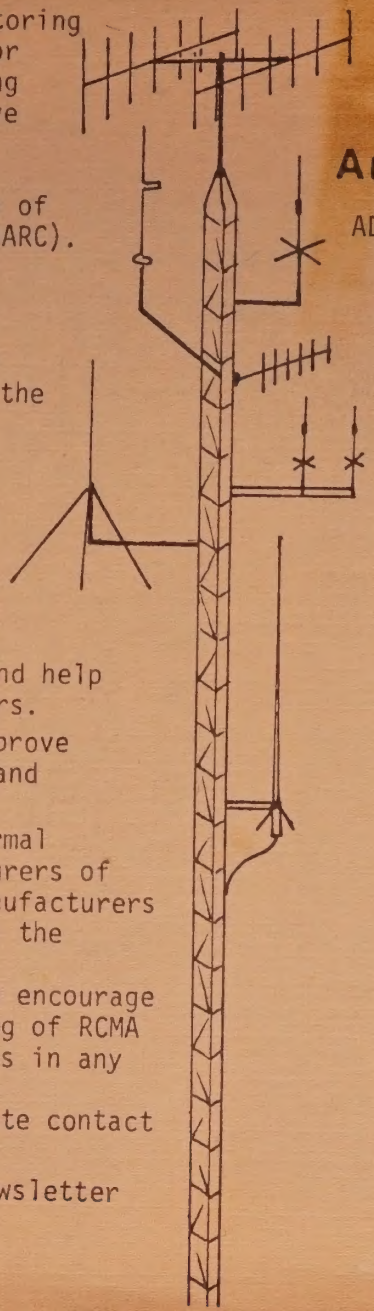
Your label also has your renual date on it. Renuals are processed through our system on a monthly cycle. Should your renual arrive on the wrong day of the cycle, it is possible you may receive two newsletters before your label reflects your renued status.

The R.C.M.A. board has been quite protective of the membership list. We have never sent the list to any commercial organization. If you have received junk mail it did not come directly through R.C.M.A.

The Radio Communications Monitoring Association is a radio club for persons interested in listening to two-way communications above 30 MHz as a hobby. RCMA was founded in May 1975 and is a Full Member of the Association of North American Radio Clubs (ANARC).

The goals of RCMA are:

1) To provide a fraternity for those who seriously pursue the hobby of monitor radio listening.
2) To try to be knowledgeable about two-way radio systems and operations.
3) To promote an understanding of the legal and ethical uses of monitor receivers.
4) To share information with and help other monitor radio listeners.
5) To try to understand and improve receivers, antenna systems and related equipment.
6) To offer suggestions and formal recommendations to manufacturers of monitor receivers and to manufacturers of other products related to the hobby.
7) To offer suggestions for and encourage the organizing and conducting of RCMA meetings and tours for groups in any geographic area.
8) To encourage and to facilitate contact between members.
9) To publish a regular club newsletter devoted to the hobby.



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